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OF

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CONTENTS—Pages 1 to 40

EDITORIALS— Page

PRESIDENT'S MESSAGE 1
THE NEW YEAR 2
FICTITIOUS FIFTY 3
EAR, NOSE AND THROAT CANCER 3
THE TEN CHALLENGES 4

ORIGINAL ARTICLES—

TREATMENT OF CHRONIC PHARYNGEAL INFECTION AND POSTNASAL DRIP IN CHILDREN—Arthur Dintenfass, M.D., Atlantic City, N. J. 5

ISONIAZID IN THE TREATMENT OF TUBERCULOSIS—A. M. Sabety, M.D., East Orange, N. J., R. A. Greco, M.D., Belleville, N. J., Ralph A. Ford, M.D., Belleville, N. J., and G. Kenneth Hawkins, M.D., Bloomfield, N. J. 11

PREMATURE BALDNESS—Irving Shapiro, M.D., Newark, N. J. 17

PUBLIC HEALTH ASPECTS OF CYTOLOGY IN CANCER DETECTION—Howard B. Miller, M.D., Fairlawn, N. J., Charles R. Moog, M.D., Glen Rock, N. J., and Frederick P. Lee, M.D., Paterson, N. J. 20

ORIGINAL ARTICLES— Page

RETICULOCYTOSIS FOLLOWING ACTH IN SICKLE CELL ANEMIA—George P. Bisgeier, M.D., East Orange, N. J. 24

SPEECH HANDICAPPED CHILDREN — Edward P. Duffy, Jr., M.D., Belleville, N. J. 26

STATE ACTIVITIES—

Diabetes Postgraduate Course 16
Chest Physicians Meeting 19
New Jersey ACS Meeting 23
Psychotherapy Workshop 25
Pediatrics Postgraduate Course 32
Pathologists—Technicians Seminar 33

OBITUARIES 32
MEDICAL-SURGICAL PLAN 33
COUNTY SOCIETY REPORTS 34
WOMAN'S AUXILIARY 36
BOOK REVIEWS 36
TUBERCULOSIS ABSTRACTS 39

Roster of Officers and Committee Chairmen, Advertising page 3A

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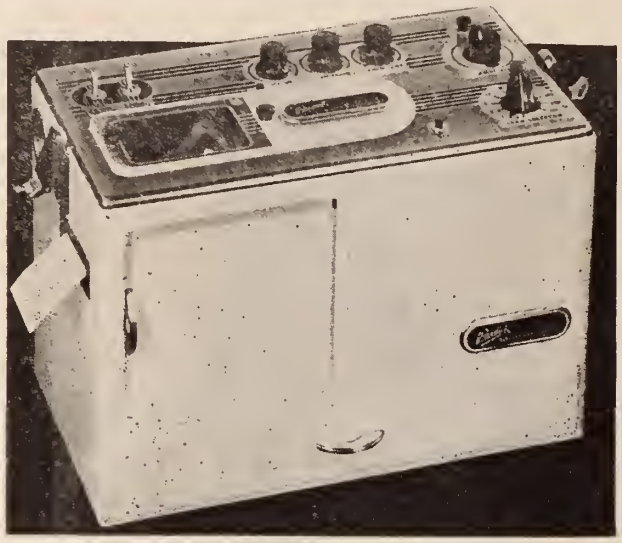
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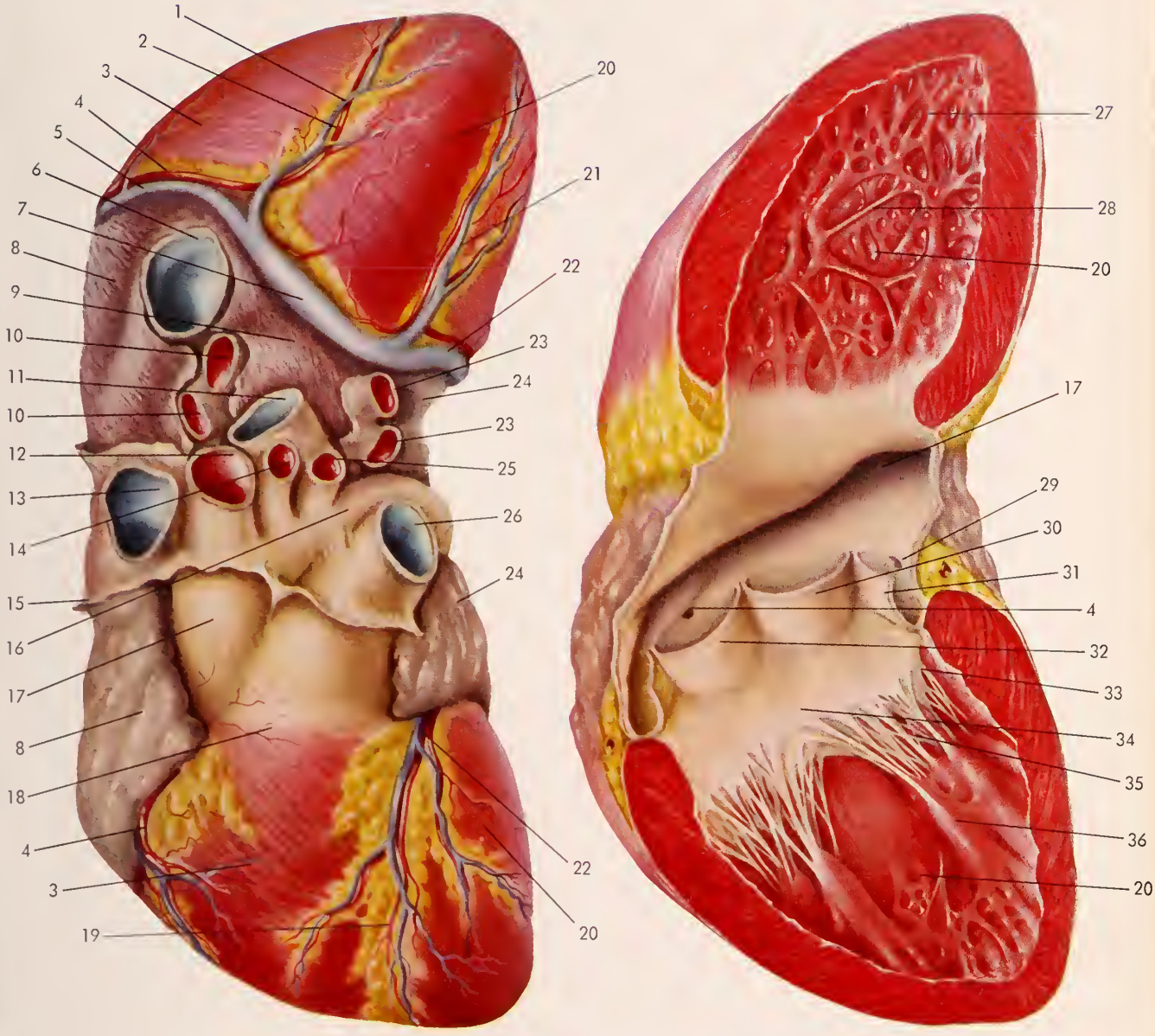
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11 Right branch of pulmonary artery
12 Innominate artery
13 Superior vena cava
14 Left common carotid artery
15 Pericardium
16 Aortic arch
17 Ascending aorta
18 Conus arteriosus
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20 Left ventricle
21 Posterior vein of left ventricle
22 Great cardiac vein
23 Left pulmonary vein
24 Left auricle
25 Left subclavian artery
26 Left branch of pulmonary artery
27 Trabeculae carneae
28 Trabecula tendinea
29 Left coronary artery
30 Posterior semilunar valve
31 Left semilunar valve
32 Right semilunar valve
33 Posterior cusp of mitral (bicuspid) valve
34 Anterior cusp of mitral (bicuspid) valve
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36 Papillary muscle

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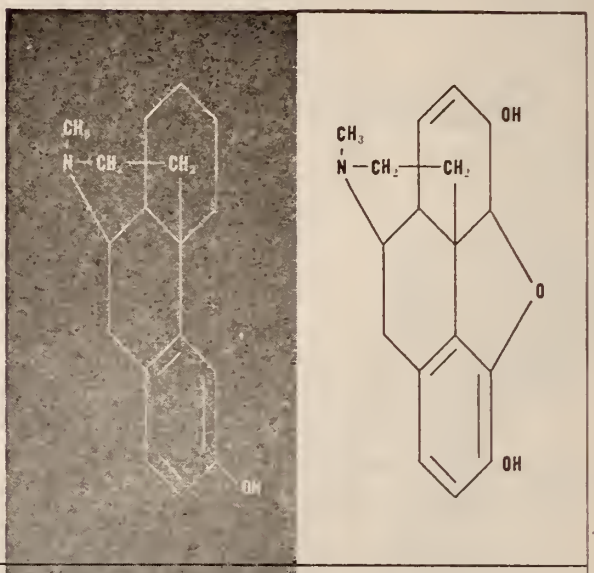
NEW YORK 18, N. Y. WINDSOR, ONT.

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*Author unidentified. From Mencken, H. L.: A New Dictionary of Quotations. New York, Alfred A. Knopf, 1942, p. 1057.

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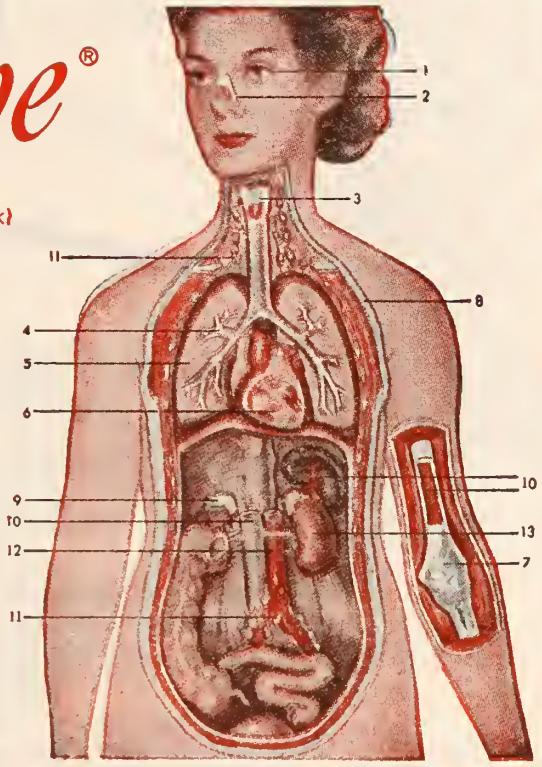
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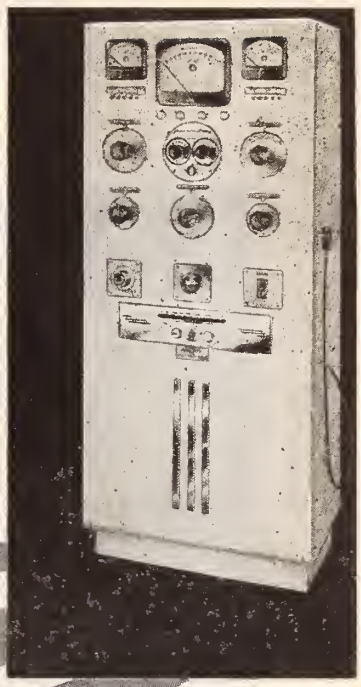
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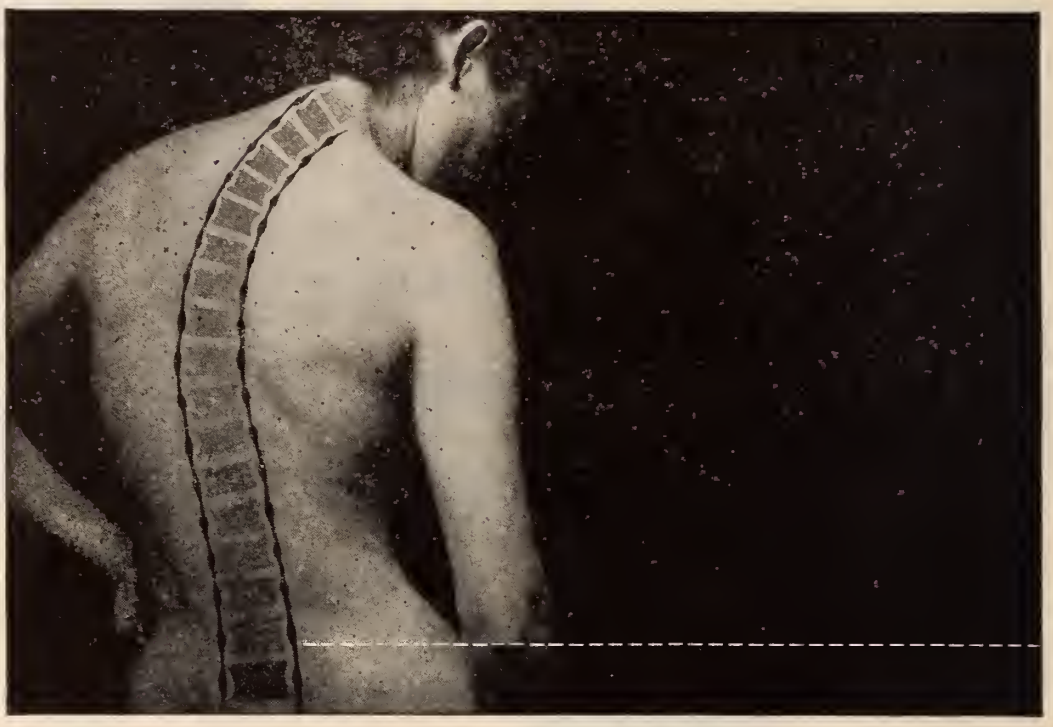
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1. Reich, W. J., et al. (1952), A Recent Advance in Estrogen Therapy. II. Amer. J. Obst. & Gynec., 64:174, July. 2. Reich, W. J., et al. (1951), A Recent Advance in Estrogen Therapy. I. Amer. J. Obst. & Gynec., 62:427, August.

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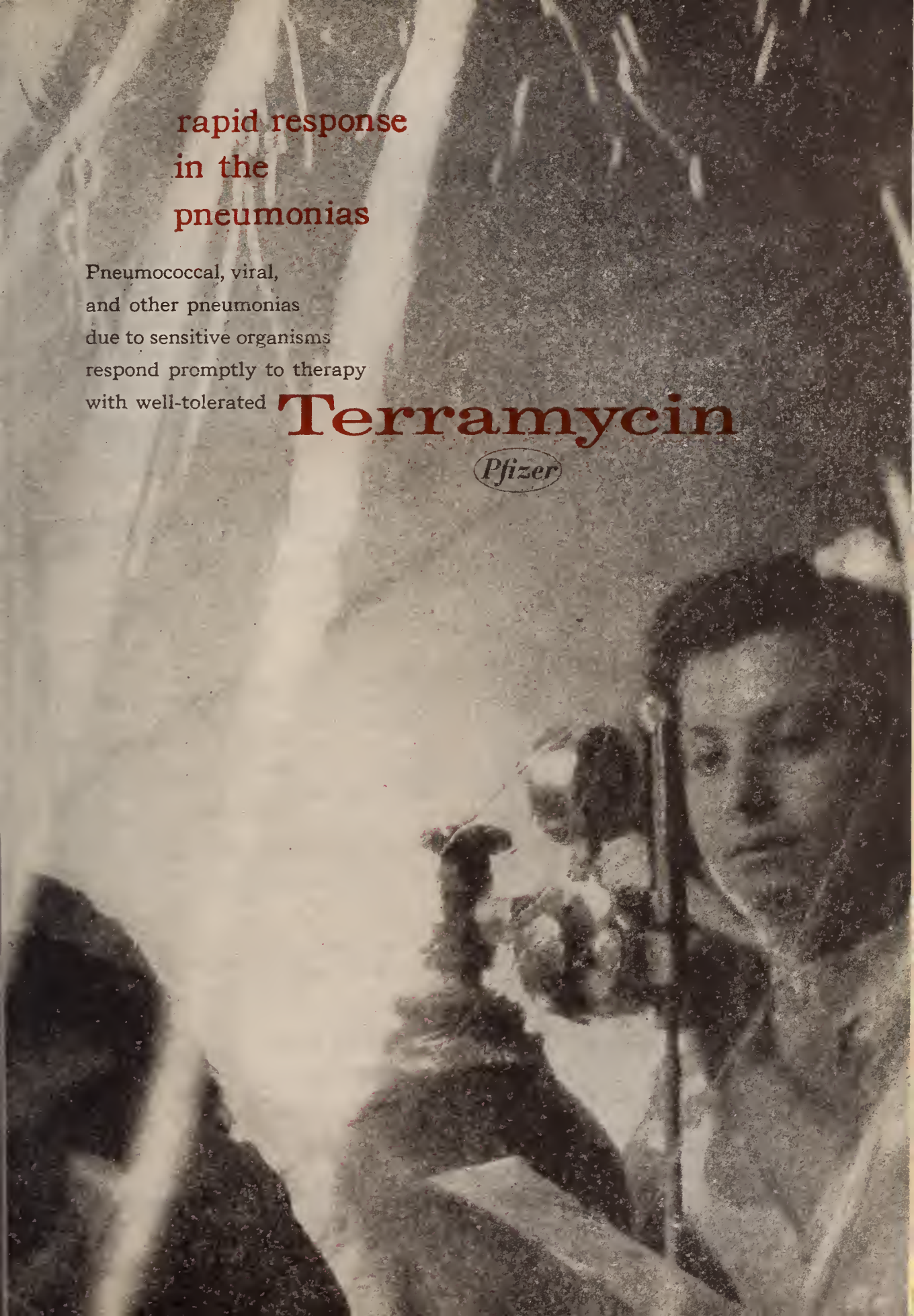
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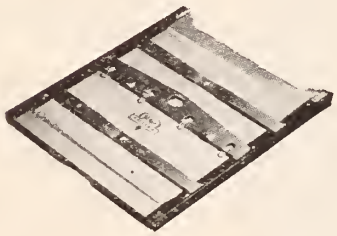
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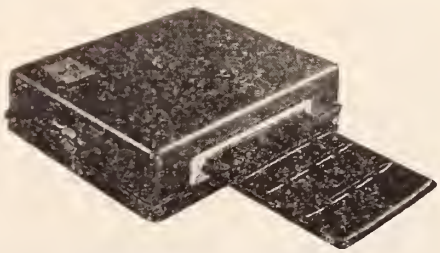




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4. Corynebacterium diphtheriae	Diphtheria carriers
5. Nonhemolytic streptococci	Some cases of endocarditis, genito-urinary tract infections

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PRESIDENT'S MESSAGE

SO MUCH—FOR SO LITTLE

It is a great privilege and honor for us to be members of an organization whose objective is the promotion of the science and art of medicine and the betterment of public health. Your American Medical Association is a physicians' organization which exists to serve the physician and the general public.

While en route to the recent A. M. A. convention in Denver your secretary and president visited the headquarters of the American Medical Association in Chicago. Within this building nearly nine hundred employees carry on the work of the various councils, committees, bureaus and departments whose activities are determined by the A. M. A.'s physician members. Nine floors house the many offices, meeting rooms, printing plants, laboratories and library.

It was interesting to learn where the money comes from and how it is spent in conducting such a gigantic operation. The total income is about nine million dollars yearly. Thirty eight per cent of this is derived from dues, 19 per cent from subscriptions to journals and publications, 30 per cent from advertising in the journals; miscellaneous investments and receipts comprise the other 13 per cent. The revenue is quickly absorbed by various activities: 54 per cent for scientific programs; 5 per cent for socio-economic activities, such as rural health and chronic illnesses grants; 23 per cent for public relations; 7 per cent for ad-

ministrative costs; 8 per cent for state journal advertising; and only 3 per cent for legislative activities.

At our December Welfare Committee meeting, Dr. Louis Bauer, president of the A. M. A. was the guest. During his inspiring address he stated that about 90 per cent of the activities of the association are devoted to scientific projects. He reminded us that our organization is the most democratic one in the country. Every member has a voice in the policies and programs of this great body. Through votes by delegates from each member's state medical society to the house of delegates of the A. M. A., he may express his dissatisfaction of exisiting or proposed policies.

A number of our members have complained that the A.M.A. dues are excessive. Fifteen dollars of the dues are absorbed by the subscription to the weekly journal and the remaining ten dollars are used to support the other activities of the association. It is interesting to note that *only one dollar and twenty cents of your money is spent on legislative activities.* Please remember this when you hear statements made by your fellow practitioners and by your non-medical acquaintances that your dues subsidize a colossal political lobby in Washington.

The dues are small when compared with the immense return which you receive from them. Through the continuing efforts of the American Medical Association you have been privileged to practice in a manner that is unique in the world today. The A. M. A. is ever on the alert to safeguard your interests and through its untiring efforts and zeal has made America the healthiest nation on earth.

When you receive your bill from your county society please do not complain about the added A. M. A. dues. They represent So Much — For So Little.

Harrold A. Murray, M.D.

THE NEW YEAR

It is perhaps too hopeful to wish each other happy new year in these troublesome times. The foreboding international scene, the fear of an economic decline, the perils of our highly mechanized civilization make one pause and wonder if a new year can be happy, and if the best is not all behind us. Our greatest achievements seem sometimes to be in the past, and the future looks gloomy.

But "hope springs eternal", and an optimistic point of view is not entirely unwarranted. The greater the problems and challenges of the future, the greater the potentiality for progress. In the millenium all will be perfect, and there will be no room for improvement. Today, at least, we can appraise our problems, and take steps towards their solution.

As physicians we can look forward this year to greater professional proficiency, new developments in the fields of physiology and therapy, advances in surgery and medical pharmaceutics. As our population grows older, we shall have greater opportunities to improve the lot of the aged, and keep them not only alive, but comfortable and happy. We should expect happier relations in the area of government cooperation, and look for better results in our clinics and hospitals. Let us not despair of the future, but rather exult in it. In the words of Robert Browning,

"Grow old along with me!
The best is yet to be,"

and let us all resolve that come what may, this year will be better, healthier, and happier than those that have preceded it.

FICTITIOUS FIFTY

Discerning readers will note that this issue of THE JOURNAL is "Vol. 50, No. 1", and will wonder what is being done to celebrate our fiftieth birthday. Blushingly we admit that we have not quite reached fifty. The first issue of this JOURNAL appeared in September 1904, and Volume 1 ended in June 1905, after just ten issues. From July 1905 to May 1914 the volume numbers ran from annual meeting to annual meeting of the Society. In 1914, to conform with a change in the Society's fiscal year, which became identical with the calendar year, THE JOURNAL's volume year started in January, and has remained so ever since. The Society, however, returned to a June-May fiscal year in 1925.

All of which means that THE JOURNAL will not be really fifty years of age until September 1953, and plans are now afoot for a gala celebration at that time.

EAR, NOSE AND THROAT CANCER

Leaders in the crusade against cancer reiterate constantly that there is one major way to improve the cure rate of cancer: early detection and prompt treatment. The Papanicolaou test, the careful scrutiny of survey chest x-rays, and the routine rectal examination are only a few of the measures promulgated with this goal in mind.

Miller* has recently pointed out that cancer of the upper respiratory tract is one of the most readily detectable malignancies, yet during the past ten years there has been no significant improvement in the vigilance of physicians towards early symptoms in this region. On the other hand, there have been great strides made in the treatment of this form of cancer. In the past 15 years 27.5 per cent of all paranasal sinus malignancy treated at the Massachusetts Eye and Ear Infirmary have shown five-year cures, and early cases of laryngeal cancer should show an 85 to 92 per cent five-year cure rate. No other area of the body except the skin has a better chance for cancer cure than the ear, nose and throat.

What symptoms should arouse our suspicions, and prompt us to make a more extensive search for malignancy? In the nose and sinus area, epistaxis in adults should be carefully investigated. If no bleeding point is seen in the anterior portion of the septum, the nasal passages should be studied as far back as the postnasal space. Persistent unilateral bloody discharge in the adult means cancer until proved otherwise. Persistent pain in the upper teeth, painless swelling of the cheek, and sudden change in the fit of dentures suggest sinus carcinoma, as do paresthesias of the cheek and even slight unilateral exophthalmos.

Nasopharyngeal cancer is suggested by nasal obstruction, postnasal hemorrhage, epistaxis, tinnitus and hearing loss, especially when any of these symptoms occur together.

Hoarseness for more than three weeks make a laryngeal examination mandatory, if cancer of the larynx is to be detected early. Later symptoms are cough, hemoptysis, laryngeal pain and dysphagia as the growth encroaches on, or invades the esophagus.

Likewise, cancer of the tonsil, external ear and hypopharynx, respectively, are

* Miller, D.: The General Practitioner and Cancer of the Ear, Nose and Throat. New Eng. J. Med., 247:601, October 16, 1952.

suggested by tonsillar ulcerations that persist, small erosions of the external ear that do not heal promptly, or difficulty in swallowing liquids and solids.

The awareness of the significance of symptoms such as these will prompt an early and complete examination of the areas indicated by direct, indirect, and radiologic means. This, in turn, will lead to faster diagnosis and more effective treatment, with consequent improvement in five-year cure rates.

THE TEN CHALLENGES

On May 19, 1952, at the General Session of The Medical Society of New Jersey meeting in Atlantic City, Dr. Harrold Murray, then president-elect, presented ten challenges facing New Jersey medicine today. For those unable to attend this meeting, his speech is reprinted in the *Official Transactions* of the 189th Annual Meeting of The Medical Society of New Jersey on page 31. It is worth while for every member of the society to read this address, and give serious thought to the problems outlined by Dr. Murray. The ten challenges about which he spoke are:

1. Physician distribution and the need for more doctors in rural areas.
2. Provision of hospital beds for acutely ill patients.
3. Improvement of public health facilities throughout the state.
4. Care of the chronically ill.
5. Increased medical research.
6. Need for a medical-dental school in New Jersey.
7. Extension of voluntary prepayment health plans and better distribution of medical service to all citizens of the state, regardless of economic status.
8. Medical emergency services.
9. Adjustment of fees to patients' incomes.
10. Improved public relations.

Each of these challenges is under active consideration by some part of the state medical society organization, and many of them are now being met, or at least a start has been made in the right direction. Our Physicians Placement Bureau is actively engaged in bringing together young physicians seeking a place to settle and communities that need their services. A liaison committee is cooperating with the New Jersey Hospital Association in encouraging the home care of the less acutely or chronically ill patient. Public health services throughout the state are being expanded to meet local needs. The remaining challenges are being studied and surveyed by committees such as the medical school committee, grievance committees in the individual county societies, establishment of emergency telephone services by each county society, and the appointment of public relations officers in many of the county organizations.

As stated by Dr. Murray, each of these items has proved a challenge, and each challenge has provoked action. These problems will be solved, and the challenges overcome, and when they are, New Jersey Medicine will have advanced far along the road toward its ideal of providing the best possible medical care for everyone.

ORIGINAL ARTICLES

THE TREATMENT OF CHRONIC PHARYNGEAL INFECTION AND POSTNASAL DRIP IN CHILDREN *

ARTHUR DINTENFASS, M.D., Atlantic City, N. J.

A clearcut etiologic diagnosis is essential in the treatment of chronic pharyngeal infection and postnasal drip in infants and children. The author has outlined the major points in establishing such a diagnosis and specific therapy for each individual cause.

The treatment of chronic pharyngeal infection and postnasal drip in infants and children, with the many associated symptoms, is a matter of concern, particularly during the winter months when these disorders exist in constant association with recurrent and persistent respiratory infections.

Early diagnosis is essential not only in making the patient more comfortable, but in preventing development defects—including hearing deficiency, psychologic trauma, and progress of the process with end results of chronic sinusitis, bronchitis, bronchiectasis, and bronchial asthma.

Chronic pharyngitis and postnasal drip describe an almost identical clinical picture, which in the following discussion will be considered as a single entity.

Treatment depends fundamentally upon accurate diagnosis. To determine the etiology and to understand the treatment, it is necessary to have a basic grasp of the anatomy and physiology of the upper respiratory tract.

Physiologic Considerations: The nose, constituting the natural airway for respiration, has three primary functions: (1) olfaction, (2) conditioning the inspired air to the requirements of the pulmonary surfaces by warming, moistening, and filtering, (3) cleansing itself of the foreign material extracted from the air. In the normal nose, ciliated mucous membrane forms a continuous lining from the vestibule to the naso-pharynx. A sheet of tenacious mucous secretion acts as a conveyor belt, overlying the cilia, propelled by the cilia from every part of the nose and sinuses to the pharynx. Ciliary pathways in the sinuses are always toward and through the ostia; in the nose, toward the pharynx; and in the bronchial tree toward the glottis. Foreign particles, (including bacteria) impinge upon the mucous sheet, which is moved posteriorly into the nasopharynx by the cilia, aided by gravity, traction, and the act of swallowing. Here the mucus, known as "postnasal drip", makes contact with the widely dispersed lymphoid tissue, the first line of defense of the upper respiratory tract.

Lymph tissue and lymphocytes play an important role in resistance. Lymph tissue is the probable site of the immune response and antibody formation, as evidenced by a convincing number of experiments.[1] Lymphocytes function in the attenuation of bacterial and viral agents; at the same time the nodes which they form act as a filtering bed for the removal of infective and particulate material.

Chronic infection and postnasal discharge cause an increase in lymph tissue due to hyperplasia and infiltration of fibroblasts. As a result of the progressive hyperplasia, the lymph tissue extends far beyond the original confines of the nodule and approaches the muscle fibers below. In time, obstruction of lymph channels and lymph vessels occurs by invasion of fibroblasts, construction of fibrous tissue and proliferation of endothelium within the lymph channels. Bacterial allergy and inhalant sensitivity likewise stimulate lymphoid tissue hypertrophy.

Anatomic Considerations: The lymphoid tissue of the pharynx is collectively known as Waldeyer's ring. This includes (1) the faucial or palatine tonsils, (2) the adenoids or pharyngeal tonsil, (3) the lingual tonsils, (4) the lateral pharyngeal bands, and (5) solitary lymphoid nodules scattered over the posterior pharyngeal wall.

The lateral pharyngeal bands are linear areas of lymphoid tissue in the most lateral portions of the pharynx, posterior to the pharyngopalatine arch. Hypertrophy and inflammation of these bands and of the solitary follicles are present in most patients with postnasal discharge.

The maxillary sinus is usually present at birth, though very small. Embryologically it is an outgrowth from the middle meatus. The ethmoid sinus, always present at birth, is considered an important source of infection in children. The sphenoid sinus develops at approximately five or six years of age, although it may be pneumatized as early as the first year of life. The frontal sinus begins to develop clinical-anatomic importance at about the eighth year; in rare instances infection has been noted at two or three years of age.

ETIOLOGY

The most frequent conditions responsible for nasopharyngeal discharge are (1) low

grade sinusitis, involving the maxillary, ethmoid and sphenoid sinuses; (2) chronic hypertrophic rhinitis, especially of the inferior turbinates with enlargement of the posterior tips, and (3) hyperplasia of lymphoid tissue.[2] Infection and obstruction of the nose therefore account for the vast majority of postnasal discharge. Basically, allergy is the underlying or stimulating factor in each of these conditions.

Less frequent causes are: patent thyroglossal cyst, Thornwaldt's disease (inflammation of the crypt of the pharyngeal tonsil with formation of a cyst), elongated uvula, benign and malignant growths, lingual varix, lingual thyroid, and atrophic rhinopharyngitis.

Proetz,[3] in a more physiologic approach, adds the following causes: thermal changes including central heating; exposure to smoke, dust and fumes; local mechanical abnormalities; bacteria, viruses, fungi and foreign bodies in the nose; metabolic, endocrine and emotional disturbances; and use of excessive and prolonged local medication.

Recent studies[4] have shown that perennial allergic rhinitis is the commonest cause of upper respiratory disorders such as sinusitis, pharyngitis and postnasal discharge. Bacterial nasal allergy, alone or in association with inhalant or extrinsic factors, is an important cause of these conditions.

Bacterial nasal allergy is considered to be intrinsic in its origin, resulting from activity of bacterial antigens directly upon the nasal mucosa.[5] Locally, the allergic reaction probably depends upon the formation of a bacterial hapten, the nasal mucosa acting as a shock organ after being originally sensitized by some pathogenic organism.

Early in allergic rhinitis the mucous membranes have the classical pale, grayish-blue appearance. With the development of local bacterial infection and sensitization, a deeper red color is acquired. Protracted infection results in hyperplastic changes and a diminution or loss of ciliary activity with consequent impairment in the drainage of the nose and sinuses. The continuation of the process produces in time polypoid degeneration, formation of polyps, and increased postnasal discharge.

EXAMINATION OF THE PATIENT

Examination of the patient must be thorough and include, when possible, in addition to the routine otolaryngologic examination, inspection of the nasal chambers following shrinkage and aspiration of existing secretion; translumination of the frontal and maxillary sinuses; nasopharyngoscopic examination following local anesthesia with 2 per cent tetracaine solution;[6] finger palpation of the nasopharynx; mirror examination of the epi- and hypopharynx; and evaluation of hearing ability with tuning forks, watch, and audiometer when indicated. X-ray of the postnasal area will demonstrate the size and encroachment of an adenoid mass on the breathing space. The eosinophile content of nasal and postnasal secretions may be significant; but the absence of esosinophiles, even after repeated smears, does not preclude the diagnosis of allergy.

TREATMENT

In the active treatment of chronic pharyngeal infection and postnasal drip, the primary aim is to obtain adequate drainage and ventilation of the upper respiratory tract and to remove the underlying etiologic agent. Conservative measures are desirable and should be used first unless more radical procedures are obviously needed. These measures include local decongestant therapy to the nose and paranasal sinuses, general supportive aids including antibiotics and vaccine therapy, and a well-planned allergic regime. More radical procedures involve the use of surgery or irradiation in removal of infected and hypertrophied lymphoid tissue.

Local conservative measures may be helpful in alleviating the patient's discomfort and at least temporarily accomplishing drainage and ventilation while more permanent measures take hold. Since the typical patient has marked nasal congestion associated with abundant mucus and some degree of sinus infection, cleansing nasal suction has often produced surprising results.

In these cases I routinely use a finely tapered right-angled glass tip, frequently described as a capillary or spot suction tip, with 8 to 10 pounds of negative pressure. Suction is repeated following shrinkage with Neosyne-

phrine,[7] one-fourth per cent solution or one of the other mild solutions which does not cause ciliary paralysis. Tetracaine[6] may be added to obtain some degree of local anesthesia. This is usually possible with complete cooperation of patients 2 years of age or older after confidence is obtained. Younger patients may be immobilized with a sheet or towel.

Others use, with presumably equal success, the Proetz displacement treatment or gentle irrigation of the nasal passages. Displacement therapy may be of value in those cases in which localization of infection is primarily in the posterior ethmoid or sphenoid sinuses, and where other measures have failed to produce the desired results. This method consists of placing the patient's head in a hyperextended position, filling the nasal passages with isotonic sodium chloride solution containing a dilute shrinking agent, and applying suction while the patient closes his soft palate. The suction should be intermittent in order not to build up too much pressure and gradually to evacuate the air and secretion from the sinuses, thus allowing the solution to enter.

Occasionally, a short series of simple nasal irrigation with warm Ringer's or normal saline solution are helpful in the mechanical removal of nasal secretion. The heat, also, may be a physical factor in producing spontaneous discharge of thick mucopurulent material from the sinuses. However, caution must be taken not to exert too much pressure since infectious secretions may be forced into sinuses or eustachian tubes and even into the middle ears. Acute suppurative otitis media has been known to occur after this procedure.

General management is important in the treatment of chronic upper respiratory symptoms in children. It is essential that the child be well nourished, have adequate sleep, fresh air, sunshine, and a happy, well adjusted environment. Vitamin supplements should be given, with the synthetic forms more appropriate, eliminating possible allergens. Night ventilation and refrigeration should be avoided. Much postnasal discharge and chronic cough may be alleviated by keeping the sleeping room warm at night and increasing the humidity.

Vaccines. There is difference of opinion concerning the use of bacterial stock and autogenous vaccines. All of us have seen many failures and some success with this type of treatment. In my experience, in carefully selected cases, where frank purulent material may be obtained from sinus ostia or adjacent areas, the use of a spot suction has proved efficacious in providing significant culture material and consequently a potent vaccine. Autogenous vaccines sometimes fail because the child has different bacterial flora with successive clinical infections. Thus, vaccine obtained during one infection may not be effective during succeeding infections.

Antibiotic and chemotherapeutic agents are valuable adjuncts in treating postnasal discharge. Since an alteration of the allergic state is so often involved, a vicious cycle is established. The allergy lowers the resistance of the mucous membranes and interferes wih ventilation and drainage, so that secondary infection becomes superimposed. This, in turn, increases the allergic tendency with bacterial factors. In many cases nasal discharge, which persists after the hay fever season, is due to sinusitis rather than to ragweed sensitivity.

Treatment of the allergic state is too often neglected. This is, in essence, treatment of allergic rhinitis. It is often undiagnosed or misdiagnosed; chiefly, because the child is first seen with a complaint which is a complication of the nasal allergy. Careful history often reveals a family background of allergic disease, and in many cases a past history of "colic" and eczema during infancy. The latter may have persisted and still be present. In children who have had recurrent colds and repeated removal of tonsils or adenoids, an upper respiratory allergy[8] should always be suspected. Other diagnostic aids include x-rays, which usually show thickening of the sinus mucous membranes; blood smears which may show eosinophilia; nasal smears, if repeated, show an increase of eosinophiles in at least 70 per cent; and properly performed skin tests. Many overlapping factors such as house dust, molds, infections and food allergens often complicate this picture, requiring patience and time to make a complete and accurate diagnosis. In some cases

elimination diets are necessary, especially when skin tests are not diagnostic.

Among the specific causes of allergic rhinitis, the inhaled allergens are most important. House dust, bedding materials, wool and domestic animal danders, cosmetics, and pyrethrum are the commonest, listed here in the order of their importance. However, ingested substances may also be involved, especially cereals, nuts, chocolate, sea foods, milk and eggs, and foods eaten raw. Smoke, sharp odors, fumes of paint and lacquers may be exciting causes. Sudden changes in temperature and barometric pressure at times produce aggravation of symptoms.

Skin tests for sensitivity are an essential part of the diagnostic procedure. Their value, depends upon the ability of the one who selects the substances to be tested and who interprets the test results. The common inhalants must be tested in each patient. Additional inhalants depend upon the history of exposures. It is wise to test the important pollens that occur in the patient's part of the country. Foods may have to be tested depending upon the type of symptoms and relationship to meals, environment, and other allergic manifestations. The patient's own house dust[9] is one test substance that should never be omitted.

Pale, bluish-gray nasal mucous membranes, polypoid degeneration of the turbinates, mulberry type pitting of the posterior tips of the turbinates, or the presence of polyps are positive proof of allergic etiology. However, these may be altered or obscured by secondary infection.

In the treatment of perennial allergic rhinitis there should be complete avoidance of offending allergens. Special attention must be paid to the removal of all allergenic or potentially allergenic substances from the bedroom, where so much of the child's time is spent. Covering the pillow or mattress with an "allergen-proof" casing does *not* establish complete avoidance of the content. Moreover, foam rubber is now readily available as a substitute. The elimination of pets from the household, stuffed toys from the bedroom, orris root-containing cosmetics, and pyrethrum-containing insecticides are only a few of the necessary measures. Avoidance of house dust is difficult. Complete avoidance can be obtained, (and at best only temporarily) by a change in residence and in furnishings. Desensitization with the patient's own house dust is usually advisable and has proved beneficial. Adequate diagnosis and treatment of seasonal hay fever is especially effective in reducing perennial symptoms. Many other details in allergic management cannot be included here; they are essential in the thorough treatment of these patients.

Symptomatic treatment during exacerbations include the use of mild nasal decongestants and antihistaminic drugs. Caution must be observed in the use of local therapy as prolonged use of drugs often causes irritation of the nasal membranes and continuation of symptoms, as well as occasional attacks of otitis media. In young children the eustachian tube orifice remains open and the eustachian tube is more horizontally placed,[10] making the middle ear more accessible. The antihistaminic drugs have proved to be of great value in symptomatic relief, but at best they are merely palliative. They should not be given over long periods of time, or when diagnostic tests are performed. Careful selection of the antihistamines will produce better results as well as reduce the undesirable side effects[11] such as drowsiness, vertigo, irritability, nausea and vomiting.

Surgical treatment of chronic pharyngeal infection and postnasal drip embodies the basic principles of surgery; to obtain adequate drainage and remove the etiologic agent.

In the nose a deviated septum or a septal spur is indication for surgical correction if there is firm lateral contact with the turbinates, since this causes interference with breathing as well as with adequate sinus drainage. In allergic patients the operation should never be performed during a pollen season, and preferably after October 15 and before April 1, lest the patient develop a new sensitivity. Nasal polyps when large enough to obstruct, must be removed regardless of season. Thorough allergic regime usually causes regression in polypoid degeneration and frequently disappearance of small polyps. More radical procedures such as antral punctures and windows, and sinus

surgery, are necessary only if there is severe sepsis of the sinus or if there is massive polyp formation within the sinus.

It is not within the scope of this paper to repeat the indications for adenoidectomy and tonsillectomy. Many believe that tonsil as well as adenoid infection has definite causal relationship to postnasal drip. Nasopharyngeal surgery is performed for massive regrowth of lymphoid tissue, synechia[12] and adhesions, enlarged plica[13] and bands, and the rare presence of Thornwaldt's bursa and tumors. As a means of prophylaxis and to obtain more lasting results, it is well to emphasize the completeness of nasopharyngeal surgery with performance under direct visualization and the aid of soft palate retraction.[14] Hypertrophied lateral pharyngeal bands and lymph follicles of the posterior pharyngeal wall are best removed by appropriate biting instruments, although electrocoagulation and chemical cautery have been used with success.

The reappearance of hypertrophied lymphoid tissue after careful surgical removal is usually caused by an active allergic state. The surgeon should not be condemned when inadequate post-operative follow-up and treatment may be the cause.

Irradiation Therapy. There is a controversy over the comparative merits of radium and x-ray treatment of the nasopharynx. The primary purpose of nasopharyngeal irradiation as developed by Crowe,[15] (using a metal applicator containing 50 milligrams of radium) is to reduce and eliminate hyperplastic lymphoid tissue in or near the orifices of the eustachian tubes, in addition to exerting beneficial effects on the lymphoid tissue throughout the pharynx. The original clinical application was for the prevention or cure of impaired hearing, which manifested itself in a loss of hearing for high tones as well as low tones. Later, roentgen therapy[16] was extended to the treatment of frequent severe colds with ear or sinus complications, recurrent adenoid tissue causing nasal obstruction, postnasal drip due to nasopharyngeal infection, focal infections in the nasopharynx, hypertrophy of the lateral pharyngeal bands, aero-otitis, and bronchial asthma.

Recently, there has been much mention[17] of the inadequacies and dangers of the radium applicator. Some have no objection to the use of the applicator in careful dosage for lymphoid tissue in the tubal region or when used after adenoidectomy for small, recurrent lymphoid masses. Others show that the dose in the immediate proximity of the radium applicators is perhaps 10 times the dose ordinarily regarded as reasonable or safe for the treatment of nonmalignant conditions.[18]

X-ray therapy is stated[18] to have numerous advantages: no anesthesia is required; it can easily be given to children with no pain and a minimum of mental trauma; the centering of the roentgen beam can be exact and duplicated without difficulty. One of the great advantages of x-ray is that the entire lymphoid-bearing area of the nasopharynx and pharynx can be irradiated with adequate dosage without harm to the skin, underlying tissue or bones.

Robbins and Schultz[19] warn against the routine use of radium or x-ray in benign conditions. They remind us that postradiation damage may be years in developing. As larger doses are being used more frequently, the likelihood of atrophy, necrosis and even neoplasm increases. The tendency is greatly enhanced by repeated series of treatments necessitating careful questioning relative to previous irradiation.

The frequent combination of hearing loss, allergic manifestations, and infection in the nose, sinuses and nasopharynx must be recognized and treated accordingly in addition to irradiation therapy.

SUMMARY

1. The fundamental concepts of postnasal discharge and chronic pharyngitis necessitate an understanding of the anatomy and physiology of the upper respiratory tract.

2. There are many causes of this condition and many avenues of approach. The fundamental etiology and treatment is concerned with the presence of chronic sinusitis, lymphoid hyperplasia, and allergic rhinitis.

3. Treatment incorporates the simultaneous use of a number of measures to promote ade-

quate ventilation and drainage of the upper respiratory tract, including local decongestant therapy, general supportive aids, antibiotic and vaccine therapy, surgery of the nose and nasopharynx, treatment of the allergic state, and irradiation therapy preferably with x-ray.

4. Special mention is made of the recently acquired knowledge that allergy is frequently the underlying etiologic agent in chronic pharyngitis and postnasal discharge in children.

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DIABETES WITH PREGNANCY

The management of pregnancy complicated by diabetes has recently been summarized by Hurwitz and Higano.* By proper handling of the diabetes, fetal mortality has been reduced from 50 per cent to 20 per cent, which is still about five times that in the nondiabetic patient. Diabetes appears to have a deleterious effect on the fetus, and this effect occurs even before the onset of diabetes. The fetal and neonatal mortality is as high in the five year period before the onset of diabetes as it is after the diagnosis has been established.

Once the diagnosis of diabetes is made in a pregnant woman she is placed on a diet of 180 Grams of carbohydrate or more, 75 Grams of protein or more, and fat according to her nutritional needs. If diet alone does not control glycosuria, the diabetes is managed with insulin; either protamine zinc and regular insulin separately, or NPH insulin. The goal of therapy is to keep the urine as sugar-free as possible without provoking hypoglycemia. The patient is seen at weekly intervals, since there is usually an increased insulin requirement in the second and third trimesters.

Patients with clearcut obstetrical indications, such as toxemia with an unfavorable cervix, placenta previa, or cephalopelvic disproportion, have sections performed. Otherwise, pelvic delivery is accomplished.

Diabetic management during labor is quite simple. Most patients in labor have taken their morning protamine zinc insulin already. If labor is prolonged there may be some hypoglycemia, for which fruit juices or intravenous glucose are administered. Usual analgesia and a low spinal anesthesia are used before delivery. After the baby is born, blood sugar determinations are done on the umbilical cord blood and the mother's venous blood. There may be a sharp drop in the mother's insulin requirement immediately after delivery to a level comparable to that taken before pregnancy. The baby's blood sugar may be independently quite low and not reflect an insulin reaction. No attempt is made to give glucose by mouth to the infant during the first 48 hours of life.

In addition to the method of management already outlined, investigations are being carried out by these authors in the treatment of diabetic pregnant women with oral diethylstilbesterol as a means to reduce fetal mortality.

* Hurwitz, D., and Higano, N.: Diabetes and Pregnancy. New England Journal of Medicine (August 28, 1952).

ISONIAZID * IN THE TREATMENT OF TUBERCULOSIS †
A PRELIMINARY REPORT

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This paper confirms earlier reports on the tuberculostatic activity of Isoniazid and stresses its value in conjunction with thoracic surgery for tuberculosis.

Much time will elapse before establishment of the final status of Isoniazid (isonicotinic acid hydrazide) in the treatment of tuberculosis. Whatever position this drug will occupy will depend largely upon the frequency of development of resistant strains of tubercle bacilli. Resistance of this nature is well known with other anti-tuberculosis drugs. In our experience, anatomic changes in pulmonary tuberculosis are major factors in the development of therapeutic-resistant organisms.

Earlier reports of success obtained with Isoniazid in the treatment of tuberculosis have been dramatic. However, many problems remain unsolved. It is not known whether relapse will occur after long term therapy. Optimum dosage has not been adequately determined. Study of the effects of combined Isoniazid and streptomycin is needed. It may be that short, alternating courses with these drugs may prevent the development of bacterial resistance. Long and careful clinical study will yield more comprehensive answers than are now available.

From Essex County Isolation Hospital, Belleville, N. J., we offer a preliminary report of treatment with Isoniazid* of 25 patients in various stages and types of tuberculosis. Four were treated with a combination of Isoniazid and surgery and 21 were treated medically with Isoniazid.

MEDICAL TREATMENT

Cases medically treated included: childhood tuberculosis, tuberculous peritonitis, tuberculous meningitis, glandular tuberculosis, tuberculous pneumonitis, and pulmonary tuberculosis. Dosage of Isoniazid was 2 to 4 milligrams per kilogram per day in divided doses. Many of the patients had previously been treated with one or more courses of streptomycin and PAS.

In general, we observed effects similar to those previously reported[1] for Isoniazid. Noted were temperature declines, decreased cough and sputum, healing of draining sinuses, increased appetite, euphoria and weight gains.

In several patients we observed an initial temperature rise of one or two degrees following institution of Isoniazid therapy. By the third day, temperatures reverted to pre-treatment levels. This response has been noted even in afebrile patients, but does not seem to be significant.

One case, of particular interest because of diabetic complications, is reported below. Response to Isoniazid therapy was remarkable.

Case 23: This 19-year old male was admitted to the hospital on December 13, 1951. He was a known diabetic of 14 years' duration. For the month prior to admission he had felt dizzy and weak, and x-rays had shown pulmonary tuberculosis with cavitation. Admission laboratory studies showed the sputum to be negative for tubercle bacilli, although monilia were present. Gastric washings were positive for acid fast organisms. The sedimentation rate was 88 millimeters per hour. Hemoglobin on admission was 72 per cent, white count was 9,900 with 77 per cent polymorphonuclears, 18 per cent lymphocytes, 3 per cent monocytes, and 2 per cent eosinophiles. Weight on admission was 79 pounds.

Streptomycin therapy was instituted, 1 Gram daily and PAS, 12 Grams daily. He gained 6 pounds on this treatment and then began to lose weight and became extremely weak and thin. He had frequent emesis and his diabetic condition was extremely difficult to control.

On March 13, 1952, Isoniazid* therapy, 150 milligrams daily, was instituted. All other anti-tuberculosis therapy was discontinued. On March 27 the patient was considered moribund. His weight was below 70 pounds. His white blood count at this time was 37,750 with 98 per cent polymorphonuclears, 82 per cent segmented forms and 16 per cent band forms. Urine was positive for diacetic acid, with hyaline casts, 2 plus albumin, 4 plus sugar and 4 plus acetone. The patient varied between insulin shock and diabetic acidosis.

Following 5 weeks of Isoniazid* therapy the patient was improved.

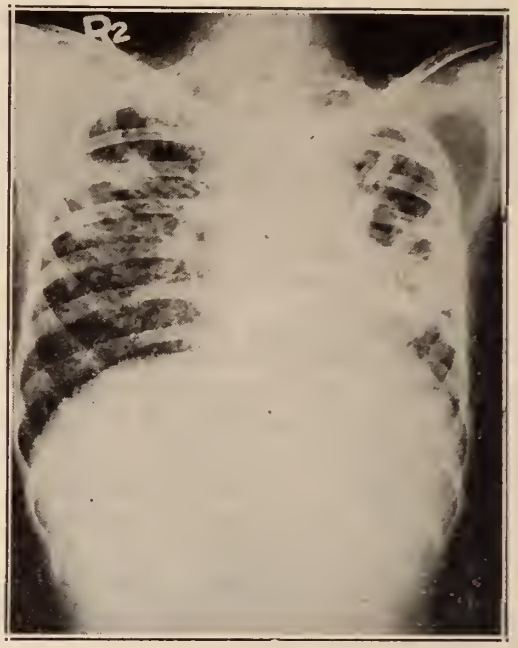


Film A (PA) Case 23.



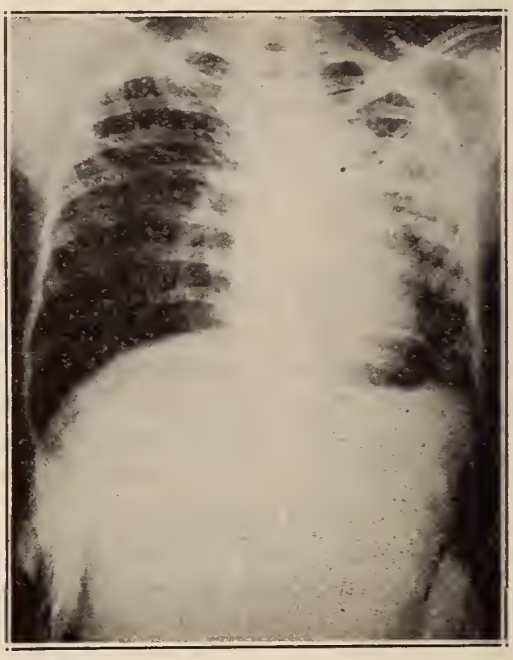
Film A (Lateral) Case 23.

Film A—12/17/51—PA and lateral chest films show extensive infiltration throughout the entire right lung, most marked in the upper half where several cavities are present. On the left side numerous radiolucencies occupy the upper two-thirds of the lung field, presumably a combination of cavities and emphysematous bullae. There is extensive consolidation of the lower one-third of the lung field.



Film B, Case 23.

Film B—2/25/52—Re-examination shows striking clearing of the infiltration in the right lung field, but there is diffuse residual disease. No definite cavity is now seen. On the left side the change is not remarkable, except for some clearing at the base.



Film C, Case 23.

Film C—6/17/52—The right lung has cleared completely except for residual fibrosis in the upper third. Marked clearing has occurred on the left. Several radiolucent shadows remain adjacent to the hilum which could be cavities, but improvement has been striking.

At present the patient has gained 31 pounds, has regained strength and his diabetic condition is now controlled. He is ambulatory and his appetite has improved greatly. Sputum and gastric washings have been negative for tubercle bacilli. The sedimentation rate is 32 millimeters per hour. There have been no changes in insulin requirements following Isoniazid* therapy.

EXTRA-PULMONARY TUBERCULOSIS

Marked improvement has been noted in 3 cases of tuberculous meningitis since administration of Isoniazid.* One patient, formerly comatose, is now sitting up in bed. Another who had been dull and listless following initial improvement with streptomycin was placed on Isoniazid* therapy. Within a week he became alert, regained appetite and was ambulatory. The third had a temperature of 105, which reverted to normal on Isoniazid* therapy. Irrational when Isoniazid* was instituted, this patient became rational one week after therapy was begun and is now taking fluids and food by mouth. He had had no response to prior streptomycin therapy and had developed 8th nerve impairment from long term use of the drug.

In one of these cases, administration of Isoniazid,* 300 milligrams daily, was followed by recovery of 3 micrograms of the drug per cubic milliliter of spinal fluid.

Two children, aged 6 and 7, with pulmonary tuberculosis and glandular tuberculosis were treated with Isoniazid,* 100 milligrams daily. Subsequently one microgram per cubic milliliter of the drug was found in the spinal fluid of each patient. Dubos' Tween-albumin medium was used as a test medium and $H_{37}Rv$ as a test organism. Serial dilutions of the cerebrospinal fluids were incubated for 14 days at 37° Centigrade following inoculation. In the study of these two cases, Dr. Jan Ilavsky was especially helpful and we wish here to record our thanks to him.

DRUG RESISTANCE

Clinical evidence of development of resistant strains of tubercle bacilli occurred in 2 of the 25 patients in this series. Case reports follow.

Case 2: This 21-year old female had been ill for one and one-half years with weight loss, chronic cough and temperature of 101 to 102. She was admitted to the hospital on December 20, 1951, where diagnosis was made of far advanced pulmonary tuberculosis with bilateral cavitation.

Treatment was initiated with streptomycin (180 Grams) and PAS (720 Grams). Her temperature returned to normal. Left pneumothorax was ineffective because of adhesions.

Isoniazid,* 225 milligrams daily, was instituted on March 13, 1952. In a short time the patient felt better, had less cough, less sputum and gained in appetite and weight. She remained afebrile. After 4 weeks of therapy, her Gaffky counts, (which had been between plus 4 and plus 6), became negative. They continued to be negative for about 6 weeks, then reverted to positive and have continued to rise. At present, the Gaffky count is plus 8. Similar effects are noted in the sedimentation rate.

The period at which this drug was most effective was between the third and fourth weeks. Onset of resistance occurred between the fourth and fifth weeks, becoming clearly apparent at the end of 8 weeks. Clinically, the patient is improved, as compared to her status prior to Isoniazid* therapy. Significant laboratory reports were as follows. The first figure in each line shows the status prior to Isoniazid* therapy.

Bi-Monthly Gaffky Counts	6	4	2	0	0	0	2	5	8
Bi-Monthly Sed. Rates	48	—	50	30	18	30	16	35	40

Case 16: This 19-year old girl was admitted July 19, 1951, following severe pulmonary hemorrhage. Diagnosis on admission was far advanced pulmonary tuberculosis, bilateral, with left upper lobe cavitations. For 7 months, she had been treated with streptomycin (166 Grams) and PAS (2,520 Grams) without noticeable improvement. Right pneumothorax was ineffective.

Isoniazid* was started on March 13, 1952, in dosage of 225 milligrams daily. All other drugs were discontinued. In 2 weeks Gaffky counts, temperature and sedimentation rates dropped. The patient gained weight, felt better, had improved appetite, less cough and less sputum. X-rays revealed some improvement as evidenced by decrease in size of cavitations.

After 8 weeks of therapy, sedimentation rates and Gaffky counts were found to be increasing, as follows.

Bi-Monthly Gaffky Counts	6	0	0	0	0	7	5
Bi-Monthly Sed. Rates	40	30	20	18	20	45	27

At present her clinical condition is improved, as contrasted to pre-treatment status. Bacteriologic studies of the resistance of M. tuberculosis obtained from sputa are under way.

Observations in these two cases indicate the development of Isoniazid-resistant strains of tubercle bacilli, confirming similar experience of Steenken *et al.*,[2] who found these effects in half of their group. They report definite evidence of increased bacillary resistance after 7 weeks of treatment with either the isopropyl derivative of Isoniazid,* or the parent compound isonicotinic acid hydrazide itself.

Our two refractory cases have both been placed on Isoniazid* and streptomycin. The

rationale for this is based on the work of Ilavsky,[3] who reports the synergistic effect of Isoniazid* and streptomycin in growth-inhibition studies *in vitro* on virulent human strains of M. tuberculosis.

Ilavsky states: "The data clearly show synergistic effect with mixtures of these two compounds. Concentrations of streptomycin which are non-inhibiting when used alone, greatly enhance the growth-inhibition power of Isoniazid, and vice versa. This effect is shown for both streptomycin-resistant and streptomycin-sensitive strains. It is of particular interest that such effects are obtained with streptomycin-resistant cultures. Results suggest that combinations of these two agents should be considered for human tuberculosis when strains fast to either agent are found or are thought to exist. It is possible that initial concomitant use will make formation of drug-resistant strains less likely, and that these two drugs can both be used in smaller doses if used together, rather than if either is used alone."

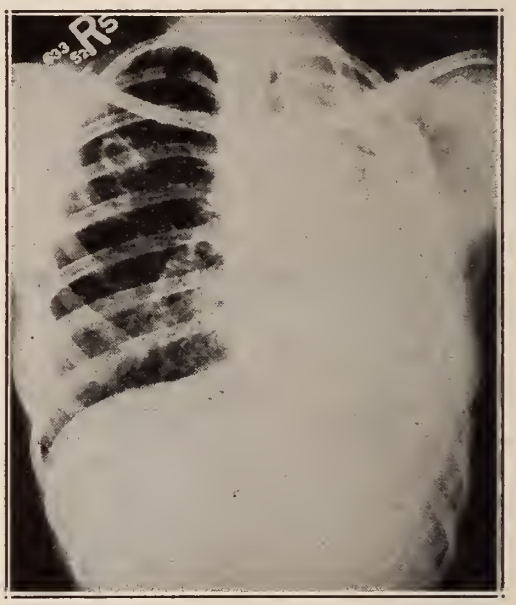
SURGERY AND ISONIAZID*

Results have been gratifying in four patients in whom Isoniazid* was used as short term therapy prior to surgical intervention. Post-operatively all four were well maintained on Isoniazid* therapy. Case report with details on one patient follows:

Case 8: This 18-year old girl was admitted June 29, 1951, with a history of productive cough, weight loss, night sweats and evening temperatures of two months' duration. Admission diagnosis was: far advanced pulmonary tuberculosis with cavitation and tuberculous empyema. White blood count was 5,500 with 74 per cent polymorphonuclears, 16 per cent lymphocytes and 9 per cent monocytes. Urine analysis showed 1 plus albumin and 30 white blood cells. Gaffky count was plus 1 and the sedimentation rate 100 millimeters per hour. The patient weighed 91 pounds and had a temperature of 103.

Therapy was initiated with streptomycin (to a total dose of 214.5 Grams) and PAS (2,844 Grams). Temperature was reduced to normal in two months. Right pneumothorax was unsuccessful because of adhesions. For several months the sedimentation rate remained high and sputum continued to show tubercle bacilli. On March 13, 1952, streptomycin and PAS were discontinued. Isoniazid* therapy, 225 milligrams daily, was instituted. Two weeks later, on March 25, 1952, a left pleuropneumonectomy was performed. Through a posterolateral incision, the bony thorax was exposed and the fourth rib removed. The pleural cavity was the seat of acute and chronic inflammatory processes causing diffuse adhesions of the lung to the chest wall. Pleural resection was performed by sharp dissection between the thoracic fascia and the pleura. The hilar structures were exposed, ligated and severed, prior to complete freeing of the lung. The bronchus was cut and the stump closed with interrupted silk.

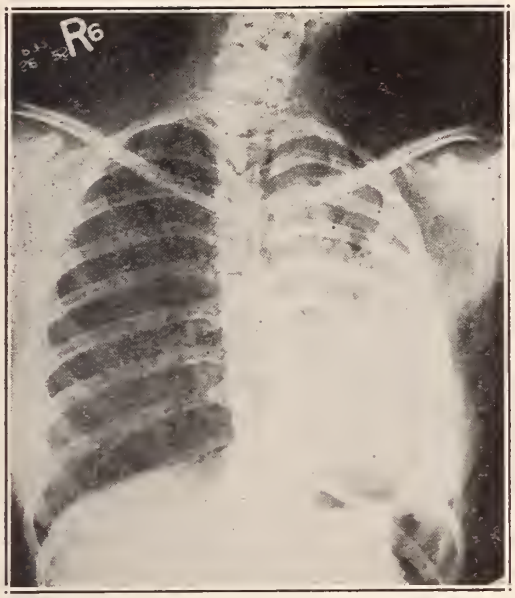
The left aspect of the pericardium was densely adherent to the pleura. The pericardium was opened and the main pulmonary vein was ligated for a second time intrapericardially. The left portion of of the left pericardium was removed with the lung. After crushing the phrenic nerve, the chest was closed in routine manner. The operation was well tolerated, except for occasional extra systoles during manipulation of the heart. This was prevented by local infiltration of novocaine. Duration of operation was three hours.



Film A, Case 8

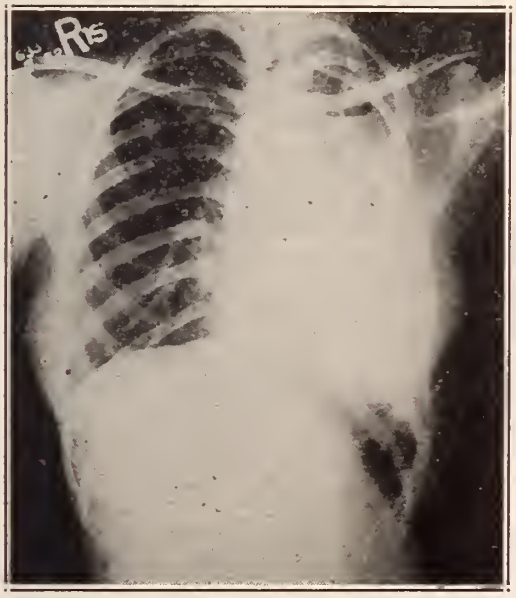
(A) *Admission:* The left lung is contracted and fibrotic with areas of cavitation throughout. The trachea is deviated to the left. Right lung is clear except for one area in the second interspace where there is a cavity 2 centimeters in diameter.

Post-operatively, she did well and was ambulatory in a few days. Temperature remained within normal limits. The present sedimentation rate of 52 millimeters per hour is still elevated, but is lower than the pre-treatment levels of 70 to 100. There has been a weight gain of ten pounds. For three months the sputum and gastric washings have consistently remained negative on smear and culture.



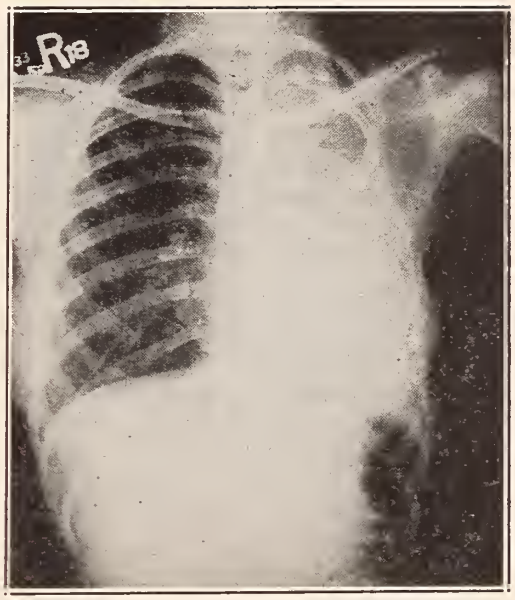
Film B, Case 8.

(B) *Pre-Operative Film:* There has been no change in the left lung, but substantial clearing is noted of the pericavitary infiltration. Diameter of cavity has decreased to about one-half original size.



Film C, Case 8

(C) *Post-Operative Film:* Post-operative film of chest shows right lung to be clear. Right pulmonary cavity previously described has disappeared and has been replaced by a small area of fibrosis. There are no areas of translucence. The left lung has been removed and several fluid levels are present in the left thorax. Bony changes are evident from the operation.



Film D, Case 8

(D) *Post-Operative Film—3 Months:* The right lung is entirely clear except for one area of fibrosis and healing.

SIDE ACTIONS

Numerous side actions have been reported[4] following therapy with Isoniazid* or its derivatives. In our series we have observed no side actions of any kind. Nor have there been any significant changes in red blood count, white blood count, hemoglobin, urinalysis, or liver function tests since institution of Isoniazid* therapy.

RESULTS

The most marked improvement occurred in four patients who were treated with Isoniazid* as a preparatory measure for surgical resection of the diseased lung. Similar good results occurred in medically treated cases of tuberculous meningitis.

Of our series of 25 patients, ten were greatly improved, while twelve were improved, but two of these gave evidence of development of drug-resistant organisms. In three patients no improvement occurred.

Of twelve patients who have had follow-up x-rays, seven showed some degree of improvement, while five had no x-ray evidence of any change.

SUMMARY

1. Isoniazid* therapy has resulted in clinical improvement in 22 patients in a series of 25.†

2. Marked improvement occurred in 10 patients. Four were treated with a combination of Isoniazid* and resection. Medically treated cases included three of tuberculous meningitis, and one each of glandular tuberculosis, tuberculous pneumonitis, and pulmonary tuberculosis complicated by diabetes.

3. In 2 of 25 patients, there was evidence of development of tubercle bacilli resistant to Isoniazid.* Both were cases of pulmonary tuberculosis with cavitation.

4. No toxic effects nor side actions were noted following Isoniazid* therapy.

5. Isoniazid* was demonstrated in therapeutic concentrations in the spinal fluid of patients with pulmonary tuberculosis, glandular tuberculosis and tuberculous meningitis following oral administration of the drug.

6. In our series, a combination of Isoniazid* and surgery offered the best immediate prognosis in far advanced pulmonary tuberculosis with cavitation.

50 South Munn Avenue, East Orange
43 Ackerman Street, Bloomfield

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*Isoniazid in the form of "Ditubin" was supplied by, and through the courtesy of the Division of Clinical Research, Schering Corporation, Bloomfield, N. J. Ditubin is the registered trade-name for the Schering Corporation's brand of isoniazid.

†From the Essex County Isolation Hospital at Belleville, New Jersey.

NON-SURGICAL TREATMENT OF CATARACTS

Senile cataracts are such a widespread source of visual disability to our aging population that any avenue of therapy should be widely explored. In a very preliminary report* from the Cataract Institute at South Kortright, N. Y., a non-surgical method of treatment has been suggested that may be of outstanding significance. Fourteen patients, ranging in age from 60 to 70, have been treated with subcutaneous injections of aqueous extracts of fish lens protein. In each case there was remarkable clearing of the lens opacity ophthalmoscopically, and clinically a striking return of vision. In some patients an almost normal visual acuity returned. Improvement was noted after as few as six injections, given three times weekly. There was also improvement in patients with cataracts associated with diabetes, hypertension, and arteriosclerosis.

Admittedly the series is small, and the report strictly a preliminary one. However, if confirmed, this work may promise restoration of sight to many thousands of individuals suffering from this dread complication of old age.

*Shropshire, R. F., Ginsberg, J. R., and Jacobi, M.: The Non-Surgical Treatment of Cataracts. Science 116:276 (September 12, 1952).

DIABETES POSTGRADUATE COURSE

The American Diabetes Association will offer a course in diabetes and basic metabolic problems under the direction of Dr. Charles H. Best at the University of Toronto, Canada, on January 19-21, 1953. There will be thirty lectures and round-table discussions and a social evening. Subjects covered will be: manifestations, complications, and management of diabetes, as well as experimental diabetes and the treatment of childhood diabetes. Details may be obtained from J. Richard Connelly, Executive Director, American Diabetes Association, 11 West 42nd Street, New York 36, N. Y.

THE A.M.A. STORY

The American Medical Association has published a brief cartoon-type booklet entitled "The AMAzing Story", explaining its functions to the layman. This little publication summarizes the activities of the American Medical Association in approving physical therapy devices, hospitals, drugs, and foods. It also outlines many other of the A.M.A.'s functions. The booklet is designed for patient distribution and copies may be obtained without charge from A.M.A. headquarters in Chicago.

PREMATURE BALDNESS

PRELIMINARY REPORT ON TREATMENT WITH TOPICALLY APPLIED ESTROGEN LOTION *

Irving Shapiro, M.D., Newark, N. J.

This stimulating report suggests the value of local estrogenic therapy in cases of premature baldness.

The importance of thyroid[1] in maintaining the integrity of the scalp hair[2] is now known. The role of estrogens and androgens in the treatment of various dermatologic conditions has recently been studied. The former have been used both by local application and systemic administration in the treatment of a variety of diseases usually associated with the menopause.[3] Thus, atrophic conditions of the vagina and vulva respond to estrogenic therapy. So does keratoderma climactericum,[4] keratoconjunctivitis sicca,[5] bullous lichen planus,[6] atrophic rhinitis,[7] and acne vulgaris.[8]

It appears that a wide range of skin and mucous membrane lesions may respond favorably to estrogen. Estrogens tend to cause proliferation and increased keratinization of surface epithelium. Further, a degree of local hyperemia can be elicited by topical application of this hormone to certain areas.[9] The topical application of estrogen has resulted in histologic regenerative changes, improved hydration,[10] and partial regeneration of elastic fibrilla in the skin.[11]

A primary factor in the development of seborrhea, acne vulgaris, and male-type pattern baldness is a relative excess of male sex hormone.[12] Hamilton,[13] produced male-type baldness in many eunuchs by appropriate androgen dosage. Many women have weak or deficient estrogen production. As far back as 1934, Barber,[14] used theelin injections successfully in the treatment of a female patient with dandruff and male pattern baldness.

METHODS AND SUBJECTS

During the past three years more than 75 patients who had previously been treated for various skin and nail disturbances have been studied. In all, it was suspected that an estrogen deficiency might have been a factor. From this series, six patients have been selected to illustrate scalp lesions which respond to the administration of locally applied estrogenic lotion. In this project, only patients free of obvious endocrine disease were treated. Endocrine therapy was instituted only after failure of ordinary measures. Most patients received urinalysis, basal metabolism, blood count, blood sugar, and blood serology. In the cases reported here there were no abnormal findings in these tests.

MATERIALS USED

A lotion containing 1 milligram per cubic centimeter conjugated estrogens, expressed as sodium estrone sulfate, in 70 per cent alcohol was applied to the scalp twice or three times daily. Average dose was 4 to 5 milligrams per day. Therapy was continued for periods from one to twelve months. All subjects were carefully followed to determine whether systemic effects developed from the locally applied estrogens such as menstrual irregularity, breast swelling, irregular bleeding, changes in libido or body hair or of pigmentation.

CASE ONE

A single white female, aged 25, noted increasingly profuse hairfall which began 3 to 4 months previously; not much associated itching or scaling. The hair was thin, dry and difficult to dress. Prior treatment consisted of massage, sulfur and resorcin lotions, Alpine rays, and varied shampoos. Menses began at age 14. Cycles vary from 28 to 32 days. Bleeding is sparse for two and one-half days.

Clinical findings: Generalized scalp hair thinning especially about the vertex was present. A fine scaling was noted over the entire scalp.

Treament: One milligram per cubic centimeter of estrogens in alcohol. Four cubic centimeters were applied to the scalp daily, divided into morning and evening applications. The patient was asked to place in envelopes all the hair remaining in the wash bowl after her weekly shampoo.

Course: Improvement was marked after three weeks. Within eight weeks the hairfall was reduced to a minimum as noted by post-shampoo collections. Itching and scaling of the scalp disappeared and the hair developed a better texture and handled more easily.

Note: A total of 240 milligrams sodium estrone was applied in a period of two months. There was no interference with the menses, no breast swelling or nipple pigmentation, no increase in weight or change in general energy.

Result: After over a year's observation she was considered recovered. No further estrogens were used. General health was good and she worked every day.

CASE TWO

A 24-year old male commercial artist began to notice profuse general hairfall one year prior to consulting me. Itching and scaling were severe and prominent. The entire scalp was covered by fine, moderately long and curly hair and a profuse fine scaling was observed. He had exhausted all common technics of treatment.

Treatment: Patient was begun with estrogenic lotion: 2.5 milligrams per cubic centimeter. Within four weeks of daily topical applications, his itching and scaling subsided markedly and hairfall was reduced.

After two months he lapsed treatment voluntarily for six weeks. Then, he returned with a recurrence of his former complaint. Treatment was again successful in four weeks. Again he lapsed treatment for two months. Once more he was given estrogenic lotion with improvement after four weeks at which time he stopped treatment only to return in another month with the old complaint of scalp itching, scaling and hairfall.

Total estrogens applied over the course of a year, in this patient, amounted to 720 milligrams with no complaint of breast engorgement or swelling, loss of potency or libido, changes in beard or voice and no time lost from work.

He realized the value of this treatment, as indicated by returns. But he did not have the stability to maintain a regular or successful course.

CASE THREE

A 27-year old male salesman noted increasing hairfall over the past four years. The scalp showed a fine scurf, vertex was sparse. Hair was thin, short, of good texture. Previous treatment had not been helpful. He was given estrogens in alcohol to be locally applied. He used a total of 1200 milligrams of estrogens in twelve months. Relief from scaling and itching developed within two months. Further hair loss was arrested by application of small amounts of lotion daily over the year. No loss of libido occurred. No increase of breast tension was noted. He worked hard and regularly at his job.

CASE FOUR

A 29-year old male candymaker had noted profuse greasy scaling and hairfall for eight years. He presented notable thinning over the entire scalp and vertex with very marked scaling. The scalp line was remarkably receded anteriorly while the remaining hair was dry and fine. He applied 690 milligrams of estrogens in alcohol to his scalp over a six month period. Within six weeks he noted reduced scaling, itching and less hairfall. After six months of treatment, he found his scalp remained clean, the hair appeared more vigorous, hairfall had ceased. Ten months after stopping treatment there was no recurrence. During the period of therapy, there was no breast swelling, and no change in libido. He worked every day.

CASE FIVE

A 26-year old married female nurse had noted scaling and thinning of the scalp for four years. She improved markedly while pregnant. Two weeks post-partum there was a severe recurrence of her old scalp complaints. She presented a generally thin fine hair with redness and greasy scales in patches over the scalp. Over three months, she applied 120 milligrams of estrogens in alcohol. There was satisfactory local improvement. A year later there has been no recurrence and patient feels well.

CASE SIX

A 40-year old married female noted a rapid loss of scalp hair which she attributed to a home permanent wave. Examination revealed hair falling, thinning of the vertex and scaling. Scaling was diffuse and fine while the hair was thin and delicate. Menses were regular with some premenstrual nausea and headaches. She received 120 milligrams of estrogens as an alcoholic lotion over a four week period. Then she felt that the scalp had improved greatly. Scaling was reduced, hairfall scarcely noticeable and three months after discontinuance of therapy there was no recurrence. There were no complaints of breast swelling or menstrual disturbances.

It appears, from this, that topical estrogens *can* control the symptoms of scaling, scurf, itching and hairfall. In women the duration and amount of therapy are significantly less than in men. This confirms Goldzieher's work[15] with estrogens.

Older conditions respond. More recent ones give excellent results. Improvement continues after cessation of estrogen therapy when adequate dosage has been used. In case 2, relapse was followed by remission on four occasions when topical estrogens were reapplied.

If menses are irregular and scanty, estrogen deficiency may be inferred. Young men working under conditions of greatly increased physical and emotional strain may suffer a disturbed androgen—estrogen ratio. The varied dermatologic manifestations of this disturbance may be corrected by restoring a relative balance with topically applied estrogens.

TABLE OF REPORTED CASES

Case	Age	Sex	Clinical Diagnosis	Previous Treatment	Duration of Symptoms—in months	Milligrams Estrogens Applied	Duration of Treatment—in months	Results	Duration Follow-up—months
1.	25	F	Pityriasis sicca, Alopecia prematura	Salves Lotions Shampoos	3 to 4	240	2	Hairfall ceased	2
2.	24	M	Alopecia prematura, Pityriasis sicca	Salves Lotions Shampoos	12	720	12	Relapsed frequently	2
3.	27	M	Alopecia prematura	Lotions Massage	36 to 48	1200	12	Hairfall ceased	4
4.	29	M	Alopecia prematura, Seborrhea oleosa	Salves Lotions Massage	100	690	6	Hair texture improved, Hairfall ceased	10
5.	26	F	Seborrhea dermatitis, Alopecia prematura	Salves Shampoos Massage	48	120	3	Hairfall ceased, Scaling ceased	13
6.	40	F	Alopecia prematura, Brittle hair	Salves Oils Massage	12	120	1	Hairfall ceased, Hair texture improved	4

SUMMARY

1. Three men and three women with scalp hair loss and scaling (the duration of which was from three to 100 months) received topical estrogens after other measures had failed.

2. Within three to six weeks, alleviation of symptoms and reduced hair loss were noted. Response was prompt and consistent. No systemic effects were noted.

3. Estrogenic lotions have a definite place in the management of resistant cases of scalp hairfall and scaling.

31 Lincoln Park

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*Acknowledgment is given Drs. John Jewell and John Scanlan of Ayerst, McKenna and Harrison, Ltd., who kindly supplied special potencies of "Premarin" lotion containing 1 and 2.5 milligrams per cubic centimeter conjugated estrogens (equine) expressed as sodium estrone sulfate.

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CHEST PHYSICIANS MEETING

The New Jersey Chapter of the American College of Chest Physicians will meet at 8:30 p.m. on Tuesday, February 24, at the Roosevelt Hospital for Chest Diseases, Metuchen, N. J. Dr. Charles P. Bailey, Philadelphia, will discuss recent advances in cardiac surgery.

THE PUBLIC HEALTH ASPECTS OF CYTOLOGY IN CANCER DETECTION *

Howard B. Miller, M.D., Fairlawn, N. J.,
Charles R. Moog, M.D., Glen Rock, N. J., and
Frederick P. Lee, M.D., Paterson, N. J.

The value of a central laboratory for cytologic diagnosis of cancer is emphasized in this article which illustrates the benefits to be derived from close cooperation between a local board of health and the physicians it serves.

The diagnosis of malignancy on the basis of cytologic changes in exfoliated cells is now a well established fact. Papanicolaou developed this method on a practical basis for the earlier recognition of cancer. Others have repeatedly confirmed the value of this work. The Papanicolaou method applied to the cervix, vaginal fluid, bronchial aspirations, urinary sediment, pleural and ascitic fluid, and rectal and gastric washings has proved valuable for cancer diagnosis in the earliest stages.

The Director of Health[1] of Paterson, N. J. moved to bring this method for early diagnosis into the field of public health in the fall of 1949. A central diagnositic laboratory was established in the Board of Health and staffed by trained cytologists and technicians. Specimens of all types of body secretions were taken by the local physicians, prepared as directed and brought to this central laboratory for cytologic study. A report was then sent directly to the physician's office stating the stage of the cycle in vaginal smears, possible infection and whether there were any signs of malignancy. A complete follow-up survey was maintained to insure as much as possible the value of this work. In all suspicious or positive cases a letter requesting either second smears or pathologic confirmation was forwarded to the physicians once a month routinely, until the necessary information was obtained. Responses to these letters were excellent and provided the means of correlation between the cytologic and pathologic reports.

Thus, a free cytologic screening and diagnostic center was established, having a centrally controlled laboratory as its nucleus and utilizing the physician's office as a local cancer detection center. The response of the doctors has been excellent as reflected in Table I.

The method has proved of great value in the following:

1. The presence of a carcinoma *in situ* (example: cervix) where nothing is visible or palpated on physical examination. Routine smears, regardless of chief complaints, aid in uncovering this condition.

2. In helping to differentiate between malignancy and menopause in cases of irregular vaginal bleeding during the menopause years. This prevents the loss of valuable time and avoids unnecessary and dangerous hormone administration if a malignancy is revealed.

3. Irregular bleeding due to over-treatment by hormones can be recognized and differentiated from malignancy.

4. Determination of ovulation and the study of sterility is greatly aided by this method.

5. To evaluate the results and prognosis following radiation therapy.

The bulk of our work is in the area of items 2, 3, and 4 above, as reflected in Table II.

TABLE I

EXAMINATIONS MADE FROM JANUARY, 1950 through MARCH, 1952

Variation of Slides	Amount
Vaginal	2,336
Cervical	3,273
Lung	165
Urine	24
Breast	36
Endometrial	6
Endocervical	5
Vulvar	2
Pleural fluid	8
Rectal	13
Mouth	4
Throat	6
Prostatic	2
Brain	4
NUMBER OF SLIDES EXAMINED ON TOTAL NUMBER OF CASES	5,884 2,943

* From the Department of Health, Paterson, N. J. Recognition is hereby given for their co-operation and skilled assistance in this work to Misses Mary Rucker, Joan Desmond and Evelyn Brown.

1. Frederick P. Lee, M.D.

TABLE II

STUDIES MADE OF SLIDES OUTSIDE OF MALIGNANCY

1.	Menstrual cycle studies	1,047
2.	Menopause	471
3.	Hormone therapy (sterility, etc.)	114
4.	Radiation therapy	10
5.	Infection	1,173
6.	Miscellaneous	169

Biopsies are unquestionably the final authority. The cytologic method is not a substitute for tissue section. It serves mainly to permit study of cases which the local physician would not ordinarily regard as suspicious enough to warrant biopsies—especially in a routine fashion.

Table III shows graphically our 30 proved positive cases comparing the clinical "suspicion" of the private physician with the cytologic and pathologic reports.

TABLE III

Proved Positive Carcinomas	Suspected Clinically	Unsuspected Clinically	Clinically Doubtful	Total
Squamous cell Carcinoma of the Cervix	8	6	4	18
Squamous cell Carcinoma of the Vulva	1	0	0	1
Carcinoma of the Recto Sigmoid	1	0	0	1
Carcinoma of the Fundus	1	0	0	1
Carcinoma in situ	1	1	0	2
Carcinoma of the Bronchus	0	0	1	1
Adenocarcinoma of the Uterus	0	1	1	2
Adenocanthoma of the Uterus	0	1	0	1
Adenocarcinoma of the Rectum	1	1	0	2
Carcinoma of the Bladder	0	0	1	1
Total	13	10	7	30

Note: Of the 30 cases, 17 were not "suspicious" enough clinically to warrant biopsies in the local physician's opinion. These 17 cases are shown in Table IV, and in Table V.

Papanicolaou has established the following system of classification which is used by our laboratory.

Class I Absence of atypical or abnormal cells: *Negative.*

Class II Atypical cells present, but without abnormal features: *Negative.*

Class III Cells with abnomal features suggestive, but not conclusive for malignancy: *Suspicious.*

Class IV Cells and cell clusters fairly conclusive for malignancy: *Positive.*

Class V Cells and cell clusters conclusive for malignancy: *Positive.*

This system has proved valuable. Class IV and Class V are regarded as evidence of malignancy in spite of a single negative biopsy. Biopsies, (especially if no visible lesion exists) represent only small areas of tissue, which might have been taken from a non-malignant area. Exfoliated cells, however, are shed from entire surfaces or linings of organs. Even if repeated biopsy examinations are negative, these cases should still be regarded as highly suspicious and reviewed frequently. Physicians are advised to seek pathologic confirmation in all Class III, IV, and V cases, even though the lesion as often happens, is clinically not suspicious.

Class II means periodic review of the patient with repeated smears. Additional clinical examination should be the rule.

Treatment for malignancy should not be undertaken on the basis of the cytology report alone.

An unavoidable incidence of false positive and false negative cases occurs in all series reported. We strive particularly to reduce the frequency of false negatives. A false positive smear results only in further investigation and no real harm is done. A false negative report is dangerous. It gives a false sense of security to both patient and physician with potentially serious consequences.

The false negative smear may be due to absence of cells in the smear, improper technic in taking and preparing the smear or error on the part of the examiner. Because of our policy of encouraging second and third smears in most cases (especially if the slightest doubt exists) false negatives have been kept to a minimum as far as our follow-up system has disclosed. The two false negatives were cases of endometrial adenocarcinoma. This is to be expected since normally, the endometrium does

TABLE IV

CASES CLINICALLY DOUBTFUL AND UNSUSPECTED

Case	Clinical Suspicion	First Smear	Second Smear	Tissue Report, Follow-up Information
1	None (Chronic cervicitis)	Class V-Squamous Cell Carcinoma	None	Cervical Biopsy-Insertion of Radium, Squamous Cell Carcinoma, Grade II
2	None (Chronic cervicitis)	Class IV-Squamous Cell Carcinoma	None	Total Hysterectomy-Primary Squamous cell carcinoma of Cervix
3	Doubtful	Positive Squamous Cell Carcinoma Class V	None	Positive Biopsy-Insertion of Radium-Probable Hysterectomy
4	None (Cervicitis)	"Suspicious"—Class III	None	Diagnostic Procedure Unknown, Positive-Radium Insertion
5	None (Cervical erosion)	Positive Class IV	Negative	Biopsy-Carcinoma in situ
6	None (Bleeding due to estrogen)	"Suspicious"-Class III	"Suspicious" Class III	D. & C. Adenocarcinoma
7	None (Cervical erosion)	"Suspicious"—Squamous Cell Carcinoma Class III	None	Total Hysterectomy Adenoacanthoma
8	Doubtful	Negative Class II	Positive Adenocarcinoma (Class V)	Adenocarcinoma, D. & C. Implantation of Radium
9	None (Diagnosis deferred)	Unsatisfactory	1 & 2 Positive Squamous Cell Carcinoma, Class V	Grade 2, D. & C. Epidermoid, Carcinoma, Radium
10	Doubtful (Fibroid)	Class III, "Highly Suspicious"	None	Biopsy-Squamous Cell Carcinoma and Radium
11	None (Diagnosis deferred)	Negative-Dried Smears	Class III, "Highly Suspicious"	D. & C. Squamous Cell Carcinoma
12	Cervical erosion	"Suspicious"-Class III	None	D. & C. Epidermoid Carcinoma of Cervix, Grade 2
13	None (Menorrhagia)	Positive Squamous Cell Carcinoma, Class V	Positive, Class V	Radium-Information Incomplete
14	Doubtful (Rectal lesion)	"Suspicious"-Class III	None	Biopsy-Adenocarcinoma, Grade IV
15	Doubtful	Squamous Cell Carcinoma, Class V	None	Biopsy-Squamous Cell Carcinoma, Grade 2
16	Doubtful	Negative, Class II	None	Diagnosis Positive, Carcinoma of Bronchus-Bronchoscopy
17	Doubtful (Radiation cystitis)	Positive, Class V	None	Biopsy-Positive for Carcinoma of Bladder

not exfoliate as does squamous epithelium. This characteristic lack of exfoliation is also present in endometrial carcinoma, particularly in those of low grade without ulceration. For this reason, false negatives are more prone to occur when only the cervical or vaginal secretions are examined. To overcome this, endometrial aspirations have been suggested as part of the study in recent literature and we now also suggest more frequent, even routine, use of the endometrial aspiration smear. It is hoped that we may thus lower the incidence of false negative reports.

TABLE V

	Number in Cases	Total in Per Cent
Number of "positives" determined by follow-up information	32	1.9%
Number of "positives" detected by cytology smear	30	1.6%
Number of false negatives	2	0.2%
Accuracy of reports determined by follow-up information	—	94%

Our smears were taken from unsuspected as well as from suspicious cases. The range of cases represents as true a picture as possible of the pathology seen in the local physician's office. Here is the first echelon of our defense. If the enemy can be recognized early here, it can be arrested. This is one method of reducing the so-called "physician's delay" in cancer diagnosis.

We hoped by the establishment of this cytologic service to bridge the gap between clinical examination and tissue biopsy; to uncover and bring to the local physician and pathologist's attention, such early cases as might otherwise go undetected until the obvious occurred. The use of a central laboratory allows thorough follow-up studies and insures that the preparation and cytologic examination are in the hands of competent and trained personnel. The close integration of cytology and pathology has been our keystone. The pathologist and clinician now regard this laboratory as an important stepping stone in aiding them in the earlier recognition of cancer.

SUMMARY

1. Cytology in cancer detection can best serve the community in a central laboratory devoted exclusively to that subject and maintained by capable cytologists and technicians.

2. Such cytologic service should be available to all the physicians in the community.

3. A good cytologic service helps to make each doctor's office a diagnostic center for cancer.

4. It is the best means now available for the early diagnosis of cancer.

5. Cytologic technics can be used for screening and uncovering other pathologic conditions.

14 Chandler Drive, Fairlawn, N. J.

NEW JERSEY ACS MEETING

The New Jersey Chapter of the American College of Surgeons will hold a clinical session in Newark on Saturday, February 7, 1952. Operative clinics will be featured at seven Newark hospitals, followed by a luncheon at the Presbyterian Hospital. Panel discussions will be held at the Nurses Residence, Presbyterian Hospital.

Further details may be obtained from Dr. Paul Mecray, Jr., 405 Cooper St., Camden or Dr. J. Harold MacArt, 120 Prospect St., South Orange.

RETICULOCYTOSIS FOLLOWING ACTH IN SICKLE CELL ANEMIA

CASE REPORT

George P. Bisgeier, M.D.,* East Orange, N. J.

The use of ACTH in relieving the hemolytic crisis of sickle cell anemia is described.

Sickle cell anemia is a chronic hemolytic anemia characteristically found in Negroes. Although indolent in its course, exacerbations of the disease—the sickle cell crisis—are often severe. To date, treatment has included blood transfusions, oxygen, and other supportive measures. The danger of further hemolysis during administration of the blood makes transfusion a calculated risk . The success of ACTH in certain other hemolytic anemias led to a trial in the following case:

A two year old colored male was admitted to the pediatric service of Newark City Hospital. He had been well until ten days prior to admission, when he developed a "cold" and fever. He received an injection of penicillin and seemed to improve. For two days prior to admission, the child complained of abdominal pain, vomited twice and was febrile. The child was known to have sickle cell anemia, having been hospitalized several times before and receiving transfusions.

He was a lethargic child with pale nail beds and mucous membranes. Temperature was 103.8; pulse 160. The chest was clear; a soft systolic murmur was heard over the precordium. Abdominal examination showed no rigidity, slight diffuse direct tenderness without rebound, and an easily reducible umbilical hernia. The liver was palpable two fingers below the right costal margin, firm and non-tender. The spleen was palpable at the level of the umbilicus, filling almost the entire left upper quadrant, and was also firm and non-tender.

Initial blood count showed a hemoglobin of 24 per cent with 1.3 million red blood cells. The patient was started on oxygen and penicillin. One hundred cubic centimeters of blood were given on the day of admission. This was the only blood the patient received during this hospital stay. One week later, the child was doing well. He was afebrile, with a hemoglobin of 44 per cent and 2.3 million red cells. However, a few weeks later, the hemoglobin dropped to 27 per cent with 1.3 million red cells. It was decided at this time to place the patient on ACTH, and he was given 20 milligrams every twelve hours for ten days: a total of 400 milligrams. As noted in the Table, there was an immediate rise in the reticulocyte count to 61 per cent, with a gradual decrease during therapy. At the end of the period of ACTH treatment, the hemoglobin was 49 per cent with a 3.3 million red count. At this time the child was active and clinically much improved. No change was noted in the size of the liver or spleen. Two days after the therapy was abruptly stopped, there was a decided drop in both hemoglobin and red count. This drop continued for one week and there was then a gradual rise in the blood values, although the height reached with ACTH was not regained.

TABLE 1

Date	Reticulocyte Per Cent	Hemoglobin Per Cent	Red Cells Millions	Per Cent of Sickle Cells	Treatment
12/29		24	1.34		100 c.c. blood
1/2		44	2.32	25	
1/7		49	2.60		
1/17	5.4	27	1.32	55	
1/18	35.4				ACTH
1/19	61.0				ACTH
1/21	56.2				ACTH
1/22	37.6				ACTH
1/23	34.0	48	2.27	25	ACTH
1/24	35.6				ACTH
1/25	30.8				ACTH
1/26	22.8				ACTH
1/28	10.2				ACTH
1/29	15.4	49	3.30	25	
1/31	9.0	36	1.71		
2/6	39.8	29	1.73		
2/8	14.4	44	1.79		
2/27		40	1.96		
3/20		36	1.92		

SUMMARY

A case of sickle cell anemia in crisis has been reported showing marked improvement with ACTH. This improvement was manifested by clinical appearance, reticulocyte response, and later a rise in the hemoglobin and red count. This latter is contrary to the report of Sass.[1] Upon cessation of the ACTH there was a drop in these values.

It is felt that ACTH may be an additional aid to the treatment of sickle cell anemia in crisis, and that further study is justified. It is also of interest to speculate whether a maintenance dose might not be of aid in prevention of crisis and other sequelae of this disease.

Appreciation is expressed to Dr. M. Shulman for his advice and the interpretation of bone marrow and blood smears.

129 North Walnut Street

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* Resident in Medicine, Newark City Hospital, Newark, N. J., from the Pediatric Service of Dr. N. Del Deo.

AUTONOMIC NERVOUS SYSTEM SURGERY

Surgery of the autonomic nervous system has made great strides in the past few years and is being used in a wider field of application than ever before. Its indications have recently been reviewed by Gardner.*

The cervical sympathetic chain has been excised in cases of cerebrovascular disease, but the effectiveness here has yet to be established. An upper thoracic preganglionic sympathectomy is now indicated where there is diminished circulation of the upper extremities due to arterial wounds, embolus or thrombosis, in cases of causalgia, Raynaud's disease or hyperhydrosis. For the relief of angina pectoris a more extensive procedure is suggested, such as excision of the stellate ganglion and upper four thoracic sympathetic ganglia.

A supradiaphragmatic sympathectomy, or splanchnicectomy may be of value in the relief of painful abdominal conditions, such as pancreatitis, as recently described by deTakats.

In hypertension four operations are used: supra- or subdiaphragmatic sympathectomy, thoracolumbar sympathectomy, or the so-called complete sympathectomy. The author prefers the supradiaphragmatic procedure.

Lumbar sympathectomy is recommended for cases of deficient circulation in the lower extremity caused by arterial wounds, embolism and thrombosis, Buerger's disease, arteriosclerosis and traumatic causalgia.

On the parasympathetic side of the fence, operations performed are vagotomy for peptic ulcer and resection of the carotid sinus nerve or glossopharyngeal nerve intracranially for carotid sinus syncope.

* Gardner, W. J.: Surgery of the Autonomic Nervous System. Cleveland Clinic Quarterly (July 1952).

PSYCHOTHERAPY WORKSHOP

Frederick S. Perls, M.D., New York City psychiatrist, will present a talk and workshop on psychotherapy at the Mental Hygiene Clinic of the Veterans Administration Regional Office, 37 Fulton Street, Newark, on January 19, 1953, at 9:30 a. m. All those interested are invited to attend.

SPEECH HANDICAPPED CHILDREN *

Edward P. Duffy, Jr., M.D., Belleville, N. J.

Parents of speech handicapped children form a small but anxious part of the patient population. What they can expect in the way of prognosis and treatment is clearly outlined in this summary of the problem.

The speech-handicapped child is not simply a patient with a speech defect. He is a complete human being with a problem in total adjustment. It is, or ideally should be, a preventive problem—in the broad sense a mental hygiene problem. If the speech defect already exists, the first question is this: do the child and family really want the defect corrected? Will they cooperate in this common effort? It must be remembered that sometimes the entire family is so adjusted to the defect, that its correction will upset the delicate balance and actually produce behavior disorders in the child.

Crying, babbling and the beginning of verbal symbolization constitute the three distinct stages of vocal evolution. These are acquired by imitation and not instruction. Normal development of speech implies normal intellect.

Crying is used by the child primarily to denote discomfort, physical or psychologic. Gestures, facial expressions and emotional adjustment of the adults in the environment all become tools in the infant's mode of communication whether interpretation or self expression.

Girls learn speech and all forms of motor coordination earlier than boys. If adults do not take overall need for vocalization in behalf of the child and set the proper patterns, the little ones will learn speech, sentence structure and grammar before those who play alone much of the time, or have other children as companions.

Speech is a complex function. Proficiency in it depends on the integrity of certain areas of the brain; on the auditory and visual apparatus; on the organs of articulation, phonation, intelligence, comprehension and the emotional factors influencing rhythm, responsiveness and symbolization. A disturbance in any of these may interfere with the smoothness of verbal communication.

MUTISM

Mutism is the absence of articulate speech. Deaf-mutism is the most frequent cause and it may be congenital or acquired as a result of disease.

Congenital deafness is not easy to diagnose. A competent medical man may not suspect deafness until the third year. The percentage of hearing loss is usually impossible to ascertain in a child with some residual hearing. Such a child is J.Z. German measles in the mother when pregnant was the cause. Previously, untreated syphilis was the principal cause of congenital deafness.

Acquired deafness occurs after ear infections, meningitis, encephalitis, tumors and such diseases. J. L. lost his hearing in the most active speech-acquisition period. The parent thought the two-year old was stubborn and "spoiled" because of too much attention during an illness. This was not the entire truth. He was "spoiled" as a result of the illness—but the otitis media and mastoiditis likewise caused deafness. That is why he could not talk.

C. R. was seven and his difficulty was easier to detect. Meningitis caused a speech defect that could be detected at once and remedied so that it did not become a psychologic problem.

A. M. was brought in because he did not speak at two years. Hypothyroidism was the cause. The referring doctor told the mother that the child would "grow out of it" and made referral only at the insistence of the mother. His retarded speech was only one part of his general retardation. Both motor and psychologic maturation, including speech, returned to normal after thyroid therapy.

I have examined several Mongolian and other types of mentally retarded children who fit into this picture. Speech may or may not be normal. If eventually normal in quality, it is slowly acquired chronologically.

Another child, a member of a large family of well-to-do parents, was loved by all the servants and even by the nursery school teacher because of a "wonderful disposition". His speech defect (about which they were all concerned) was but one of the signs of mental deficiency of a high-grade type. The parents were not helped by the school principal who could not admit the child to the school because he thought "she would be better off in an institution". The fullest well-being of the child requires an optimistic approach—not a negative one. A special school for exceptional children to permit total development of the child, including speech, is really needed.

Acute contagious diseases can cause deafness or mental retardation or paralysis of the palate with the presenting symptom of a speech defect. There are other reasons why a child with normal speech apparatus and no congenital defect, does not speak. Hysteria, schizophrenia and other psychiatric disturbances may also cause what is apparently a speech problem. For all this, such children may suddenly speak normally to the astonishment of all who know them. They fail to speak, not because they do not need so to do, but because they purposely withdraw into "their own inner selves".

DELAYED ONSET

Parents, relatives, or older siblings may have so anticipated the needs of the child that there is no need for making his wants known. Long severe illnesses, like rheumatic heart disease, tuberculosis of the spinal column and chronic diseases of other organ systems can cause delayed speech.

Inadequate speech stimulation, because of environment and scarcity of stimulating physical and psychologic contacts bring about this state. Blind children fit into this group, and present somewhat the same absence of stimulation because of an absence of an essential sensory organ.

I have had some experience with the normal child who has been starved emotionally. This is not uncommon in children living in orphanages and inadequate foster homes while awaiting adoption. Perhaps they may be neglected or "passed over" by those caring for them, or potential adopters, because they are not attractive enough as children without parents to get tender loving care.

Children who are in a non-stimulating speech environment may be of superior intellect and still not talk. They have been known to lead an almost vegetative existence. I have seen children of entirely normal background still speechless at three. But correct evaluation of this defect is indicated at this time. The oldest such normal but speechless child the writer has seen in New Jersey was four. When these tots begin to acquire speech, they do the job rapidly and normally enough. There is often a history of delayed speech in the family history of such children.

DISORDERS OF ARTICULATION

Lisping, lalling, rhotacism, gammacism and dentals are the chief types of this defect. The causes are acquired or congenital defects of the tongue, lips, jaw or teeth which affect chiefly the enunciation of consonants causing disturbed articulation. Children with hypertrophied tongues, burn scars of the lips, tongue birth marks and tumors of the tongue and lips are obvious examples.

A few children have these disorders because of neuro-muscular diseases, affecting these organs. Normal children who have poor muscular coordination may be included. They are clumsy afoot and in articulation. This is different from a sluggish child who has developed poor articulation habits. The spastic child and those with other neurologic diseases present disorders of articulation. Orthodontic problems are also found in the group, as for example, marked malocclusions of the teeth.

The child with a chronic disease is not so likely to have this except through imitation. Improper auditory perception can be the cause of disorders of this type, but not usually. That old but ever new misconception of the cause of tongue-tie speech defects is best summarized by that famous pediatrician, Dr. Brennerman: "Tongue-tie never interferes with nursing; very little, if at all, with articulation; never causes delayed speech; and, unless marked, rarely requires treatment". Regressive speech and infantile patterns of speech are merely termed "baby talk".

PHONATION DISORDERS

Deformities and diseases of the nose, palate, uvula and larynx interfere with sounding of vowels, causing phonation disorders. Disorders of pitch, tone, tempo and intensity of speech express all the forms of emotionally conditioned sounds. The tonal variations of babies' cries point to that fact. A baby may have an abnormally hoarse voice and the parents are disturbed. Assurance that anatomic structure and pliability are normal and there is absence of disease in the voice box cartilages, in the soft uvula and the vocal organs, and that the baby has the same type of voice as the mother of a "famous torch singer", is certainly assuaging.

But to say this before ruling out the possibility of a tumor of the vocal chords *via* a laryngoscopic examination, would be unsound. For example, one child had a phonation speech defect of tonal quality. After the proper investigation, it was found that he had a papilloma of the vocal chords, still another due to constant screaming and a "singer's node" of the vocal cords, non-malignant type. Other infections of the nose and throat, including the post-nasal drip of a chronic sinus infection, or of an allergic rhinitis, deviated septum, hypertrophied turbinates, nasal polypi, nasal spurs, new growths adenoidal and harelip and cleft palate are every-day examples of diseases that need medical care, and not therapeutic nihilism.

Conduction deafness, otitis media, otosclerosis, nerve deafness, congenital defects of organs of Corti, encephalitis, meningitis, head injuries, and vascular abnormalities or disease, all fit into the same category. All types of ataxia, degenerative diseases, and congenital syphilis may cause phonation defects. Use of narcotic drugs and alcohol are often detected, or suspected, at least, by intermittent disabilities in the teen-age child. The anti-histaminics and motion sickness drugs cause such problems.

One little epileptic, well controlled by an anticonvulsant drug, occasionally has slurring or phonation difficulties because of that drug. This patient could easily be confused with a drug addict by an over-enthusiastic teacher or well wisher. If the teacher or principal were made aware of the case as a medical problem, either would know how to avoid improper speech advice or attempts at correction.

Endrocrine disorders, such as thyroid, adrenal and pituitary diseases affecting secondary sexual characteristics can influence the tonal quality of speech. The normal changing voice of a 14-year old boy has medical significance in a boy of seven who had an adrenal tumor; and in another precocious girl of 7 years who developed a husky voice.

Emotional problems can cause a squeaky voice; or whispering or loud and belligerent tones, or a high strident one. Investigation is needed. Speech therapy is often contra-indicated in case of emotional origin.

DISORDERS OF RHYTHM

The continuity of diction is broken up by clonic and tonic spasms of the muscles which participate in the mechanism of speech. It is often accompanied by associated movements, not apparent until the child has become aware of his problem and tries to control it.

Stuttering was not known among primitive peoples. No congenital deformity or organic disease has been proved to be the cause of stuttering. This includes laterality or its malfunctioning and heredity. Stuttering families have a permissive family attitude toward stuttering. Probably that is psycho-genetically determined. One of the best ways to perpetuate stuttering is an attempt at direct speech treatment in the younger child. It is different with the older one. It has been said by Johnson[1] that "stuttering is a diagnosogenic disorder in the sense that the diagnosis of stuttering is one of the causes of the disorder." Hesitation and repetition in a pre-school child should not be classified as stuttering. In such cases, manipulation of the environment or modification of parental attitudes is all that should be required in the average case.

DISORDERS OF COMPREHENSION

Children may appear in a doctor's office because the mother cannot cope with the child's undue aggressiveness, school problems and inattentiveness. This child does not wish to be inattentive. But he does not understand language properly and he becomes uninterested. The chronic diseases, discussed previously, are

often causative. Yet other causes may be the specific spotty language defect that results from school absences and consequently missed fundamental knowledge as well as inadequate environmental stimulation. Word deafness is a defect involving the inability to comprehend the meaning of spoken words. Verbalization may be entirely absent since the child is aware that his utterances convey no recognizable words to parents or playmates. He may present no serious problem until school age because he can make himself understood by gestures and sign language since he comprehends the meaning of all the words he hears. There are relatively few of these cases. The future of these children is dubious because the normal intelligence they possess is clouded with inability to comprehend the world in which they live. Adjustments without psychiatric help are difficult.

A school for the deaf, perhaps in an urban setting, would be best able to cope with this child and to teach lip-reading or sign language. Again a rural life, with adequate speech therapy and psychotherapy, might accomplish the best results of all.

APHASIAS

Sensory or receptive aphasia is a disturbance of comprehension of other peoples' languages. Specific reading disabilities used to be included in this but they are now usually considered of emotional origin.

Motor or expressive aphasia does not cause mutism. Nor does it reflect mental deficiency. The prognosis is good should the child already have acquired speech. If the youngster is just beginning to talk, the matter is more serious. Certain of the writer's patients have had a brain abscess, a cyst, or hydrocephalus. Brain pathways are destroyed so that he may understand, but cannot speak.

PSYCHOTIC CHILDREN

Schizophrenic children have the speech tools, vocabulary and even the grammar necessary but are completely unintelligible most of the time. This is because the child's world is one of fantasy. Penetration of this iron curtain would perhaps allow us to comprehend this abnormality and actually speech might be normal in content if we only knew what they were thinking.

Psychotic children will not benefit from speech therapy alone. Deaf mute children do best in day schools or, in some cases, in residential schools where specialized training is directed along with speech as part of the whole illness.

GENERAL MANAGEMENT

Problems of articulation and phonation may require repaired palates. Harelips and other defects of this type, even when adequately repaired, need all the forms of speech aid, social service and psychotherapy obtainable. Even when the organic defect no longer exists, the habits of psychic trauma and speech pathology, due to structural defect, persist and require correction. Situational and emotionally-conditioned factors are important. Speech therapy is essential. More speech correctionists and more medical team work are needed.

A child, properly diagnosed and in the care of speech correctionists, has days when he is not "just up to par". Correctionists should understand this. It is wise not to push a child on days like those. The youngster may have just recovered from influenza or pneumonia and is more subject to fatigue, though back at school, or he may have anemia from one cause or another. Such conditions lessen ability of children to concentrate. Their emotions are less stable. Conflicts can easily arise between the speech correctionist and the child. Rapport is essential and must be nurtured carefully. Some children are stronger constitutionally and have longer spans of attention-giving. All of these factors must be taken into account lest speech correction be seen as an objectionable task. In one such case, the speech was actually better at home, in school, or in the doctor's office than at speech class where, due to a "spite reaction" against the teacher his speech actually appeared regressive. Shyness and hyper- or hypotonicity may be the cause of a mild speech defect or impediment. Many an organic defect may cause a primary speech impairment that in turn may give rise to a personality problem. It is important to know which condition was first in such cases: the disorder of speech or of personality.

Any type of defects may be worsened in children with problems emerging out of prematurity, malnutrition, anemia, vitamin deficiency, undue fatigue (inadequate sleep or rest or overexhaustion) and glandular disorders such as thyroid disease.

There are some problems, however, that should not be confused with speech defects by classroom teachers: improper grammar, incorrect pronunciation, substandard ability to read silently, or aloud in front of the other pupils, more or less habitual lack of preparation for class recitations; certain types of personality maladjustments wherein much fantasy and dreaming occur and an apparent schizoid tendency is detected.

Only in hesitation and repetitive speech and perhaps some stutterers, in the pre-school grades and early grades is there any chance of improvement without particular treatment. In most of the other types, more harm than good is done by the "let him grow out of it" attitude. Doctors should not use "nerve tonics", sedatives or such other medications, except when indicated with full evaluation of the total personality problem. Even if they should help, they would be only of temporary advantage as a psychologic prop. Such treatment would not be an aid to proper diagnosis and long term treatment of the basic difficulty.

A fair evaluation of the total assets and liabilities of a speech handicapped child is an essential duty of all professional workers in this field. The teacher can help by:

1. Suggesting medical examination.

2. Conferring with parents and calling for help from guidance department, dramatic teacher and other appropriate personnel.

3. A general conference should follow with an eye to total evaluation of the case. A qualified speech teacher should be present, if possible, as a visitor, if she is not available in the particular school system.

4. Do not make the child self-conscious. It is preferred that the youngster be observed at home, in the classroom and on the playground, in relationship to his speech in these varying environmental situations, during which time specific aid may be possible.

5. The teacher should see that the child goes to a speech or handicapped children's clinic or is referred to a state agency if no private facilities are available. Use married, non-working correctionists if available, on a part time, pay or volunteer basis.

6. While in contact with the child, care must be taken to enunciate clearly, use words properly in a natural melody and rhythm. The need for rapid answers from the child should be obviated. The speech of a child depends on the multiple attitudes of those in his immediate environment: parents, playmates and companions. Superintendents of schools, boards of education and even the communities should be included in this cooperative work. The intra-personal and intra-agency relationships of these varied disciplines in his social sphere will directly and indirectly influence the patient toward normalness or make him drop further back in school work.

No therapy should be tried until there is complete understanding of the total problem. At such a conference the effort should be merely to lessen tension, shyness and anxiety at first. It is better to do nothing than to overstress the speech problem, especially in the presence of other pupils.

The public school's tradition of mass education is fine for those without problems; but there must be individualization as to counsel and treatment in these cases. Over-optimistic or under-optimistic approaches are not desirable in the routine necessary to restore afflicted children. The psychic damage these inordinate attitudes do is beyond repair.

Listening to inspirational lectures by professional workers is dangerous. It keys up the listener to do something immediately. The momentum rapidly becomes lost when it is found that school boards, teachers, even parents may be unwilling to cooperate. It is best to have a short-range plan ready for immediate implementation and a long-range plan ready when it can be used. If the distant goal cannot be achieved, let the sights be lowered temporarily to aim at a nearer goal. School officials may need as much time to educate parents toward speech correction as the teachers need to educate the children: perhaps it will take even longer since it is not necessary to overcome any child's resistance to increased taxes.

Group therapy is being used more and more and it has intrinsic values and advantages. In some centers group speech correction for parents and children, separately and individually, is being conducted by speech correctionists under university guidance. Often parent classes in speech obviate the need for a speech teacher

in the individual home. In the younger age groups, pre-school and up to the first grade, the parent who has been indoctrinated by a professional speech correctionist, can do more than a correctionist psychologically.

The aim of the community in speech problems should be to individualize. It should not resort to the mass education routine used upon the normal child. Apparently similar speech problems should not be standardized into a pattern of speech correction. The needs of the child as an individual should guide all disciplines even when groupings are planned. All correction should suit the needs of the one concerned. Thus, there may be twelve stutterers in a school. This does not mean that they are all doing it from the same cause. A "standard" approach cannot solve all problems. Each child with a speech defect has his own sensibilities and a personal attitude toward speech.

One town, for example, had a speech consultant but there was no rapport between this excellent expert and the teachers of the community in which one boy stuttered. Without medical, teacher or adequate parental education, this correctionist began speech treatments. With lack of full cooperation in the community, the speech teacher's attitude was that she could not help children who needed speech correction by attending meetings with teachers and principals in scattered rural territories all day long. This attitude grew with her until she met a psychiatrist who informed her that, in the boy's case, the father stuttered but was a well adjusted and successful farmer. A broken home in childhood had probably caused the paternal defect. The father (but not the child) was told that the boy was imitating his stuttering out of his worship of him. When the father was informed that the child would not outgrow it without help, his attitude changed and finally he almost conquered his own defect. The speech teacher aided the boy to overcome his. Meanwhile, a psychiatrist was able to have the boy show his father how "easy" it was to stop stuttering. Both had the incentive. The boy stopped and the father almost did. A changed attitude stopped the stuttering—that's all except the expert knowledge of the psychiatrist and the correctionist who worked together to accomplish the practical result.

Though there may not be an experienced speech correctionist available in small communities, these special disciplines may be helpful, just as general practitioners of medicine can help each other greatly when they have special interests and training in cardiology, gastroenterology and allergy. Doctors can help other doctors with less training and experience.

Such cooperation does help most medical problems without recourse to specialists or visits to distant medical centers. There is no reason why teachers who have had some training in speech should not aid others whose interest might have been in other fields. A classroom teacher may be likened to a general medical practitioner: he cannot be expected to know everything about everything, but nevertheless that is expected of him.

Speech centers should be so organized that *total* evaluation of the child is possible. This requires total mobilization of all resources available in this program. Speech correctionists already constitute a new profession. Their numbers will increase. They, the doctors, the teachers, the psychologists, the nurses and the social workers will, if they work together, slowly but definitely raise the mental hygiene level of the next generation's school population.

379 Washington Avenue

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*Read at the Annual Meeting of the Speech Association of New Jersey, Nov. 11, 1951 at Atlantic City.

1. Johnson, Wendell: Speech Handicapped School Children. Harper and Brothers, New York (1948).

STATE ACTIVITIES

PEDIATRICS POSTGRADUATE COURSE

A postgraduate course in pediatrics will be offered at St. Michael's Hospital, Newark, N. J. on six consecutive Wednesday afternoons, starting March 25. This course, designed specially for general practitioners, will consist of lectures, ward rounds, clinics, and conferences.

The faculty will include Dr. Samuel Karalitz, Dr. John Caffey, Dr. Ernest Arnheim, Dr. Carl H. Smith, Dr. Lawrence B. Slobody, and Dr. Harry Bakwin, all from New York City.

Application should be made before March 1, 1953 to Dr. Harrold A. Murray, St. Michael's Hospital, Newark, N. J. The fee for this course is $25.00.

OBITUARIES

DR. NORMAN W. BURRITT

Dr. Norman W. Burritt of Springfield died November 27, 1952, at the age of 59.

Dr. Burritt was graduated from the University of Buffalo Medical College in 1921; he interned at the Broad Street Hospital, New York, and the Newark Eye and Ear Infirmary. Dr. Burritt practiced in Summit as an eye, ear, nose and throat specialist since 1923. He was chief of his specialty section at the Overlook Hospital in Summit, also senior attending bronchoscopist at Newark Eye and Ear Infirmary and consultant in bronchoscopy at Bonnie Burn Sanatorium, Morristown Memorial and Rahway General Hospitals. He was a former president of the Union County Medical Society, a Fellow in the American Academy of Ophthalmology and Otolaryngology, and a Fellow of the American College of Surgeons. He was president of the Chatham Board of Health for more than 15 years.

DR. HUGH F. COOK

Dr. Hugh F. Cook of South Orange died on November 14, 1952, at the age of 80.

Dr. Cook was born in Bridgeport, Conn., and was graduated from the College of Physicians and Surgeons, Baltimore, in 1896. He interned at Alexian Brothers Hospital, Elizabeth, and started to practice in Newark in 1897. He was co-founder of the Newark Private Hospital. In 1947 he celebrated his fiftieth anniversary as a Newark physician, and in April 1951, he was named "Man of the Year" by the Notre Dame Club of New Jersey.

DR. MARCUS A. CURRY

Dr. Marcus A. Curry of Greystone Park died on November 11, 1952, at the age of 74.

Dr. Curry was born in Warrensburg, N. Y., in 1878, and was graduated from Albany Medical College in 1904. Following internship in Albany Hospital he became a staff physician at Glen Mary Sanitarium at Owego, N. Y. After a brief period in Canada he joined the staff of Central Islip State Hospital and in 1909 began his career at the New Jersey State Hospital in Greystone Park. In 1920 he became superintendent of that institution.

During his 41 years at Greystone Park he initiated many improvements in the care of the mentally ill and was the co-author of a volume about frontal lobe surgery. Dr. Curry was a life member and past-president of the Morris County Medical Society, a member of the New Jersey Neuropsychiatric Association and the American Psychiatric Association, the Association of Research in Mental and Nervous Disease, the American Hospital Association and the New Jersey Hospital Association. In addition, Dr. Curry was an active participant in civic and fraternal affairs.

DR. ABRAHAM E. JAFFIN

On November 25, 1952, Dr. Abraham E. Jaffin died at the Jersey City Medical Center.

Dr. Jaffin was born in 1884 in Lithuania and received his medical degree from the College of Physicians and Surgeons (Columbia University). He served as an intern and resident at Mt. Sinai Hospital, New York City and was on the staff of the New York Polyclinic Hospital and the Jersey City Medical Center. He was also consulting physician at the B. S. Pollak Hospital for Chest Diseases and at the Bayonne Hospital.

Dr. Jaffin served as a medical officer in the Army during World War I and completed postgraduate studies at the University of Vienna shortly thereafter. He was a Fellow of the American College of Physicians, a member of the National Tuberculosis Association, and President of the New Jersey Tuberculosis League in 1949-1950. He was also chairman of the Advisory Committee on Chest Diseases of this Society for several years. He was active in civic affairs in his community.

Medical-Surgical Plan of New Jersey

"New Jersey's Blue Shield Plan"

On behalf of the Board of Trustees of Medical-Surgical Plan of New Jersey, we offer this brief year-end progress report to the medical profession throughout the State.

Thanks to the splendid cooperation of our Participating Physicians, Medical-Surgical Plan has received a warm acceptance by the people of New Jersey. In the past year alone, enrollment in the Plan has grown from 669,000 to nearly a million persons. Our enrollment representatives of the New Jersey Blue Cross Plan have enrolled a record number of new subscribers for any similar period of the Plan's history. Furthermore, the ratio of cancellations to new subscribers has decreased very decisively which is a further indication that the public has confidence in the Plan and in the profession whose participation makes such a program possible.

Experience in the operation of Medical-Surgical Plan, plus the economic and social changes of the past few years, have shown the desirability of our making some major changes in the Subscription Contract. Some of the indicated changes involve problems of medical policy. We expect, within the next few months, to place these problems before the profession, and to ask your help and guidance in finding solutions that will benefit both the subscribers and the physicians.

We expect to consult The Medical Society of New Jersey on these matters, through the new Liaison Committee designated to consult with the Plan, through the Board of Trustees of the Society, and, ultimately, through the House of Delegates. It is likely that at an early date we shall canvass the opinions and advice of each individual physician on certain questions, through a direct questionnaire to all physicians.

Your Blue Shield Plan is your own constructive solution to the problem of providing medical care on a prepayment basis.

In fact, you *are* the Medical-Surgical Plan, and we, to whom you have entrusted the operation of the Plan, are only the trustees of the funds the people have deposited with the Plan for eventual payment of your necessary services.

Royal A. Schaaf, M.D., *President*

A.M.A. FILM LIST

The Committee on Medical Motion Pictures of the American Medical Association announces the publication of a new film list, naming 78 medical films not readily available from other sources. Interested persons may obtain a copy of this list by writing to the Committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn Street, Chicago 10, Ill.

PATHOLOGISTS-TECHNICIANS SEMINAR

The combined Societies of Pathologists and Technicians will hold their annual technical seminar at the Presbyterian Hospital in Newark on February 15, 1953. At that meeting a demonstration of the refresher course in prothrombin time determinations given recently at St. Michael's Hospital in Newark to a group of 24 New Jersey technicians will be shown.

COUNTY SOCIETY REPORTS

BERGEN COUNTY

John E. McWhorter, M. D. Reporter

The regular monthly meeting of the *Bergen County Medical Society* was held on the evening of December 9, 1952 at the Nurses Home of the Hackensack Hospital, Hackensack, with the vice-president, DR. WINTON H. JOHNSON, presiding.

The following were elected to membership: DRS. BERNARD ETRA, AUGUST W. MOSER, JOSEPH PIRETTA, JACOB PRAGER and ROBERT O. O'CONNOR. DRS. STEPHEN B. DEWING and WILLIAM ROE were advanced from associate to regular membership.

Dr. Johnson called attention to several matters printed in the Executive Committee minutes in the Bulletin as worthy of special reading. He requested that those physicians who had recently returned from service rise and receive the applause of the membership.

Dr. Johnson welcomed the members of the Pharmaceutical Association to the meeting and introduced the President of the Association, MR. MARTIN ULAN, and the Chairman of the Inter-Professional Relations Committee, MR. MAURICE JOONDEPH.

A "Symposium on Antibiotics" was presented as the program of the evening, with the following speakers:

"Medical Aspects" — WILLIAM N. HUBBARD, JR., M. D. Assistant Dean, New York University College of Medicine; and "Surgical Aspects" — FRANK L. MELENEY, M. D., Professor of Clinical Surgery, Columbia University College of Physicans and Surgeons.

Drug exhibits by several pharmaceutical houses were on view in the rear of the auditorium.

BURLINGTON COUNTY

William F. Betsch, M.D., Reporter

On November 13, 1952, the *Burlington County Medical Society* met at the Welfare Home in New Lisbon.

A tour of the institution was conducted by Mr. William Leonard, Superintendent of the Welfare Home, and Dr. Willlam E. Bray, Medical Director.

Thereafter, county welfare problems were informally discussed, as President A. B. Peacock introduced Mr. Ferdinand Rose, Chairman of the Welfare Board of Burlington County.

This meeting afforded an excellent opportunity for the profession to integrate its programs with those of the Welfare Board of Burlington County.

CAMDEN COUNTY

James P. Harbeson, III, M.D., Reporter

The regular meeting of the *Camden County Medical Society* was held on December 2, 1952, with President COLLIER in the chair. There were 64 members present.

DRS. ALEXANDER A. INTROCASO, ERNEST F. DOHERTY, JR., BENJAMIN R. PARADEE, and CHARLES F. GRABIAK were introduced and sworn in by Dr. Collier.

Dr. Robert A. Cooper introduced the speaker, DR. W. EMORY BURNETT, Professor and Head of the Department of Surgery of Temple University School of Medicine, who spoke on "Surgical Lesions of the Chest". Numerous diseases of the chest that were amenable to surgical salvage were discussed and illustrated by roentgenograms and colored slides. Dr. Burnett emphasized the importance of early recognition and prompt study of small asymptomatic lung abnormalities.

A letter from the Judicial Council of the State Society concerning rebates on prescriptions by some pharmaceutical houses was read.

CUMBERLAND COUNTY

Frank J. T. Aitken, M.D., Reporter

The regular meeting of the *Cumberland County Medical Society* was held on December 9, 1952, as guests of Dr. Charles Cunningham and the administration of the Vineland Soldiers Home. DR. NORMAN HENRY presided, and 35 members and 4 guests were present.

MR. REX MCCROSSIN, Superintendent of the State Soldiers Home, briefly discussed the history and unique features of the 52 year old Veterans Hospital.

DR. IRVING NELSON of Cedarville, was taken into our membership by transfer.

There were 29 couples at the first annual County Medical Society and Woman's Auxiliary dinner-dance which was highly successful.

Dr. Samuel Pole, III, reported on the Medical Section meeting on the Conservation of Vision and Hearing, at present a subcommittee of Child Health. The Society advocated supporting ophthalmologists of our Society as examining and consulting physicians in the Public and Parochial Schools.

DR. VINCENT P. BUTLER, Second Vice-President of the State Medical Society, conducted an open forum on the prospectlve State Medical and Dental College, after outlining the history and purpose of the project.

GLOUCESTER COUNTY

Louis K. Collins, M.D., Reporter

DON B. WEEMS, M. D. presided at the regular monthly meeting of the *Gloucester County Medical Society* at the Woodbury Country Club, November 20, 1952.

The first part of the meeting was devoted to the scientific program, the speaker being CHARLES M. NORRIS, M.D., Assistant Professor of Laryngology and Broncho-Esophagology, Jackson Bronchoscopic Clinic, Temple University Hospital, Philadelphia. With the aid of colored slides and motion pictures, Dr. Norris excellently discussed "Hoarseness."

Questlons concerning AMA dues were discussed

and the secretary was instructed to write to the State Society secretary for clarification.

Dr. Weems then appointed the following committees: Chronically Ill—Drs. H. W. Wright, F. G. Wandall, J. S. Wentzell; Cardiovascular Diseases—Drs. Clarence A. Bowersox, and J. Paul Burkett; Hospital Relationships Committee—Drs. Fred J. Faux, J. E. Wentzell, J. G. Kehler.

HUNTERDON COUNTY

John B. Fuhrmann, M.D., Reporter

The *Hunterdon County Medical Society* met on November 25, 1952, at Old Timbers Restaurant.

The following were elected to membership: ANDREW DICKSON HUNT, JR., MORRIS PARMET, and JAMES J. SULLIVAN.

A scroll and key were presented to MORRIS H. LEAVER M.D., D.D.S., in commemoration of his fifty years in the practice of medicine.

DR. VINCENT P. BUTLER, second vice-president of The Medical Society of New Jersey, spoke briefly on the activities of the State Medical Society and commented on public relations, the chiropractic bill, and the proposed medical-dental school for New Jersey.

After the meeting a buffet dinner was served to the Society and the members of the Woman's Auxiliary who had been meeting in an adjoining room.

MIDDLESEX COUNTY

Harold V. Cano, M.D., Reporter

DR. CHARLES H. CALVIN, president, opened the regular meeting of the *Middlesex County Medical Society* at Roosevelt Hospital, on November 19, 1952.

DR. FRED KESSLER of Woodbridge was elected to Regular membership on transfer from Kings County Medical Society; DRS. WILLIAM ALLGAIR of South River, JOHN R. HELFF of New Brunswick, ARTHUR L. ROTH, Perth Amboy and WALTER A. WADSWORTH of New Brunswick were elected to Associate membership.

Dr. Dern of Woodbridge, was appointed physician of the "Baby-Keep-Well" Station in Middlesex County.

A request by the Woman's Auxiliary for a twenty-five dollar Saving's Bond from the County Medical Society, to be used as a prize in their nursing essay contest was approved.

A letter from Dr. Isabelle M. London, requesting the formation of a committee to organize a "Health Council" for the County of Middlesex was referred to the Public Health Committee.

Dr. Henry Haywood of New Brunswick, was appointed chairman of the Cancer Committee.

A resolution was approved that the Middlesex County Medical Society appoint a committee to be known as the "Hospital Advisory Committee to the Blue Cross" for the investigation of all hospital admissions. Dr. Slobodien's amendment that the staff of each hospital submit the names to the County Society for approval was accepted.

A resolution was made and approved that the feelings of the Middlesex County Medical Society, concerning the chiropractic bill recently presented to tbe State Assembly be made known to the members of the State Assembly through the Public Relations Committee.

Dr. Calvin requested members entering the U. S. Armed Forces to notify the secretary of their branch of service and date of induction.

MORRIS COUNTY

Albert Abraham, M.D., Reporter

The *Morris County Medical Society* held its regular meeting at the Chilcott Laboratories, Morris Plains, on November 20, 1952.

The guest speaker was DR. CONDICT CUTLER, Assistant Clinical Professor of Surgery at Columbia University and Director of Surgery at Morristown Memorial Hospital. Dr. Cutler's topic was "The Management of Surgical Emergencies in Elderly People". He spoke at length on the history of the development of special surgical technics for the aged person.

He described the development of interest in this field commencing with the establishment of a special Geriatric Surgical Service at the Goldwater Memorial Hospital, New York City, twenty years ago. At that time a special group of three hundred patients from 65 to 102 years of age were admitted to the Goldwater Hospital for treatment. In dealing with surgical emergencies in this elderly group several things soon became evident. Age per se was no contra-indication to surgery. Anesthesia was well tolerated. Dr. Cutler stressed the need for gentle rather than rapid surgery; and also the need for supportive therapy such as transfusion, fluids, vitamins, et cetera; early ambulation too, seemed to be an important factor.

PASSAIC COUNTY

David B. Levine, M.D., Reporter

The *Passaic County Medical Society* met at Valley View Sanatorium, Paterson, on November 18, 1952, with DR. JOSEPH M. KEATING, presiding.

Emeritus Membership was recommended for Dr. Charles A. Keating, a 40-year member, and Dr. Elroy W. Smith, retired from active practice after 20-year membership. Elected to membership were: Active—DR. CHARLES H. HALL, JR., Upper Montclair; Associate—DRS. JOSEPH A. ADAMCIK, Passaic; JOSEPH J. BONO, Allwood; GEORGE M. MEIER, Butler; WILFORD J. RATZAN, and RALPH J. VEENEMA, Paterson.

Dr. Keating introduced the speakers of the scientific session. MICHAEL R. RAMUNDO, M.D., presented "The Present Status of Resectional Surgery in Tuberculosis". JAMES R. ROGERS, M.D., then spoke on "The Present Status of the Use of Isoniazid (Isonicotinic Acid Hydrazide) in the Treatment of Tuberculosis" and quoted statistics on the undesirable side effects of these various chemotherapeutic agents. GORDON W. ROSE, M.D., presented a study of the effects of Rimifon on blood coagulation in tuberculous patients and case reports of patients receiving the isonicotinic acid derivatives. ABELARDO A. BRENES, M.D., resident physician at Valley View then spoke on a case of tuberculous meningitis effectively treated with the isonicotinic acid derivatives.

WOMAN'S AUXILIARY

AUXILIARY REPORTS

Cape May County

Mrs. LaRue Yingling, Publicity Chairman

At the September 16, 1952, meeting held at the Atlantic City Country Club, Miss Dorothy Rice, county nurse, discussed the proposed plan for general public health services throughout Cape May County instead of the present specialized system. She asked the aid of the Auxiliary in establishing this system. Miss Rice reported that Cape May County had thirty representatives present at the Regional Public Health Meeting in Atlantic City in April.

The President, Mrs. Carl Records, presided at the regular meeting of the Auxiliary at Old Court House Building, Cape May Court House, on November 18. Mrs. Edward Dyer, State Auxiliary president was guest speaker and told us our job was to make the doctor's voice heard. Mrs. Clarence Whims, state chairman of Nurse Recruitment, discussed at length the details of setting up a Nurses Scholarship Fund. The County Medical Society has asked us to set up the scholarship and they will aid financially.

There have been a few requests for the rural health films. We have given this project publicity and hope that it will continue to be in demand.

Form letters have been distributed to all the Auxiliary members to complete the medical histories of husbands.

Cumberland County

The Woman's Auxiliary to the Cumberland County Medical Society entertained the members of the Medical Society at a buffet supper dance December 6, 1952 at the Cohanzick Country Club. The club was decorated in seasonal trim; holly, pine, candles and miniature Santa Clauses being used to carry out the Christmas motif. There was also group carol singing.

Mrs. Sherman Garrison, Jr., Program chairman, and Mrs. M. N. Harris, chairman of the Hospitality Committee, were in charge of the arrangements. They were assisted by Mrs. A. D. Sewall and Mrs. Benjamin Berkowitz.

Hostesses for the evening were Mrs. H. S. Branin, Millville; Mrs. R. A. Levenson, Vineland; and Mrs. E. C. Greene, Bridgeton.

According to all reports, the affair was a great success, bringing together many previously unacquainted members and their wives.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Public Speaking for the Professions and Clubs. By Samuel Kahn, M.D., New York, 1952. Greenberg, Publisher. P. 244. ($3.00)

"Eye contact" is one of the secrets of effective speaking detailed in this book. "Do not permit members of the audience to become jealous" warns the author "because you have fixed your eyes upon one person. Practice strict impartiality."

The book is crowded with these gems of advice. Perhaps it is best to quote them verbatim, lest some one think that the reviewer is making it all up. Speakers are admonished to "be tactful, truthful, factual, modest, helpful and dynamic"—surely one of the most practical prescriptions ever written! Gestures are explained. Thus, ". . . when the speaker is discussing sex, passions or the lower instincts, he may point both hands towards the floor." In this connection, the author advises: "the bigger the audience, the bigger the gestures". Many a budding orator will be helped by such friendly advice as ". . . a roaring lion, a pistol shot, a tender kiss. . . all can be better expressed with the help of good gestures".

Half the book is taken up with a "Public Speaking Glossary" into which the author has crowded many pearls. This chapter opens with the shrewd observation that "an able public speaker is a successful and experienced one". He fearlessly defines the "After-dinner speech". Here is his illuminating definition. "The after-dinner speech traditionally follows a dinner. . . " There is no end to the help offered; thus: "when a speaker selects his clothing for a particular occasion, it will be wise for him to keep in mind the different purposes for which clothing is generally worn". Again: "Every public speaker should know how to be funny". Dr. Kahn then cannily points out that "any type of illustrative material which helps to clarify a speech is helpful". Particular assistance to the novice speaker is offered by the author's profound observation that "keenness is a quality which every good public speaker should have". And here is a truly pioneer discovery, "One of the fundamental tools of public speaking is language".

These are fair samples of the jewels found between the covers of this book. What more can one say?

Henry A. Davidson, M.D.

Ophthalmic Plastic Surgery. By Sidney A. Fox, M.S. (Ophth.), M.D., F.A.C.S. Assistant Clinical Professor of Ophthalmology, New York University Post-Graduate Medical School. Pp. 290. New York, Grune & Stratton, 1952 ($15.00)

Written for the practicing ophthalmologist, this book includes practically all the basic classical operations used in ophthalmic plastic surgery. It is well illustrated with diagrams of the various procedures and many actual case photographs.

The work is divided into 17 chapters, the first four of which adequately deal with fundamentals such as the anatomy of the brow and lids, principles of lid surgery, types of grafts and their uses, and technical details. Canthoplasties, tarsorrhaphies, and the management of lid notches and colobomata are included in the next three chapters. The management of the various types of entropion and ectropion is well discussed. The chapter on ptosis is very well done, the author favoring an adequate resection of the levator if any levator function is present. There is a good discussion on the choice of procedure for various degrees and types of ptosis, and the more popular procedures are described.

Reconstruction of the eyelids and socket, and the use of hair-bearing grafts are dealt with in the remaining chapters.

At the end of each chapter is an excellent reference list.

This book will be of value to any ophthalmologist or plastic surgeon interested in this subject. It is especially valuable because the author has had personal experience with practically all the procedures described.

ARTHUR E. SHERMAN, M.D.

La Malattia Sclerodermica. By Professor Guido Bassi, Bologna, Italy. Pp. 701. Bologna, Instituto Editoriale Medico.

This is one of the most complete monographs available on the subject of "Scleroderma". The publishers made a good job of this volume. The paper is good, the printing and illustrations are excellent. Among the topics satisfactorily considered by the author are scleroderma of the skin, vascular scleroderma, visceral scleroderma, avitaminosis, rheumatism and scleroderma, "osseous" scleroderma, Thiblerge and Weissenbach syndrome; hyperparathyroidism, dysendocrinism; allergy; and "Patogenesi nervosa".

There is an exhaustive bibliography of 74 pages!

This unusual monograph is recommended to all physicians and students interested in scleroderma who can read Italian.

HYMAN I. GOLDSTEIN, M.D.

Sterility; Its Cause and Its Treatment. By J. Jay Rommer, M.D. Pp. 424. Springfield, Ill., Charles C. Thomas, Pub., 1952 ($12.50)

Dr. Rommer presents a systematic review of etiology and treatment of female and male sterility. It is important to emphasize again the need for investigating both partners with equal thoroughness when a childless couple appeals for help. In this age of strain and stress, changing food habits and a tendency to sedentary life, the incidence of infertility has increased.

The author discusses in detail the physical, hormonal, dietary and psychological causes of infertility. Due emphasis is placed on the role played by anxiety, fear, and frustration in sterility and marital maladjustment. He points out the importance of recognizing and correcting ovarian dysfunction during adolescence in order to prevent sterility later in life. These ovarian disturbances are the amenorrheas, the dysmenorrheas and functional uterine bleeding.

Dietary, hormonal, surgical and radiation therapies are discussed in detail. The role of psychological therapy is pointed out. The standard diagnostic methods and their value are clearly brought out. Artificial insemination is well covered. There are several original suggestions for the management of idiopathic sterility, such as precoital instillation of 10 cc. of amniotic fluid into the vagina, and tests for semen allergy.

The above mentioned features together with extensive bibliographies and pertinent illustrations make this book a very desirable addition to the existing publications on sterility.

RITA S. FINKLER, M.D.

Cortone, A Handbook of Therapy. P. 129. Merck and Company, Rahway, N. J., 1952. Free, on request.

The anonymous authors of this small volume have summarized the therapeutic aspects of cortisone pharmacology. The bulk of its pages are devoted to emphasizing the effectiveness of cortisone in a variety of diseases, and little is mentioned of cortisone's inadequacies. In all fairness, however, enough attention has been given to undesirable side effects and contra-indications so that this book cannot be classified as glorified advertising material.

The first section deals with the place of cortisone in the overall pattern of medical management. Thus, in discussing the treatment of rheumatoid arthritis, the value of proper diet and physiotherapy are related to the administration of cortisone. A table of the response to cortisone of various diseases summarizes the relative indications of this drug.

A large middle section describes the clinical response of a number of diseases to cortisone, and the dosage used, with illustrative case reports. There is an excellent insert of colored plates graphically presenting the response to cortisone treatment of rheumatoid arthritis, asthma, rheumatic fever, conjunctivitis, a variety of skin conditions, *et al.*

The final clinical section deals with contra-indications and metabolic abnormalities that one may expect with cortisone.

Being brief and clinically slanted, this book is primarily of practical value. Its price recommends it, for it can be obtained without charge by request from Merck and Company, Rahway, N. J.

R. D. GOODMAN, M.D.

Advances in Medicine and Surgery. From the Graduate School of Medicine of the University of Pennsylvania. Pp. 441. Philadelphia, W. B. Saunders Co., 1952 ($8.00)

Advances in Medicine and Surgery admirably illustrates the dedication of the Graduate School of Medicine of the University of Pennsylvania to provide basic education for physicians practicing one of the medical, surgical or dental specialties. This volume presents advances in medicine and surgery comprising the varied yet integrated fields of adrenal cortical hormones, electrolyte balance, pain, the cancer problem, viral disease, functional disorders, pulmonary infections and the problem of pre-operative care and preparation.

Of necessity, treatment of these subjects is of varying quality and thoroughness because of the number of contributors. However, all of the articles are worthy of perusal and thought.

In spite of the continual publication of reviews purporting to bring physicians to the front line of medical information, I feel this symposium should be of interest and benefit to the reading physician, bringing this tired individual back into the classroom to revivify himself from the cool fount of fresh knowledge.

HENRY GREEN, M.D.

Physicians Handbook. By M. A. Krupp, M.D., N. J. Sweet, M.D., Ernest Jawetz, M.D., and C. D. Armstrong, M.D., Los Altos, California, 1952. Lange Medical Publications. P. 381. Seventh edition. ($2.50)

For $2.50 you really get your money's worth in this highly practical *vade mecum* for the physician. It packs into less than 400 pages an enormous variety of practical information from history taking to technics of liver function tests; from the clinical features of malaria to tables for converting milligrams to grains; from technics of delousing to the reading of electrocardiograms. It rates tops on examining a comatose patient and a table of normal blood chemistry values. It has information on radio-isotopes, on how to determine the purity of milk, and on how to distinguish the rash of Brill's Disease from the rash of Rocky Mountain Spotter Fever. You can learn here how to do a blood count, how to calculate drug dosage for children, how to interpret a radiographic silhouette of the heart and how to do a psychiatric examination. It tells you how to digitalize a patient rapidly or, if you prefer, slowly; what anthelmintic drugs to use for what kind of worms; and how to convert Fahrenheit degrees into Centigrade. All this is packed into a volume only ⅝ of an inch thick and only 7 inches tall: almost vest-pocket size. The type is, of course, small, but not even presbyopic eyes will reject it. The index is adequate and there is an ingenious system of ready-reference by marginal markings. All together, it's well worth the space in any doctor's bag or on any doctor's desk.

ULYSSES S. FRANK, M.D.

Dynamic Psychiatry: Frustrated Women. By Louis S. London, M.D., New York, 1952. Corinthian Publications, Inc. P. 132. ($3.00)

For some reason, Dr. London still clings to the obsolete method of trying to present material entirely in the form of cases. To be sure, the case-report is the backbone of medicine; but unless the subject is first presented, the cases themselves do not give the reader the general knowledge he needs. Ideally, a book first explains the etiology, pathology, diagnosis and treatment of the disorders in its specialty, and then uses cases to fill in the skeleton or salt the story, as it were. Dr. London, however, gives nothing but case after case. All of these are cases of women with sexual problems. The material is lop-sided in that it fails to give any picture of the vast areas of psychophysiologic symptomatology, where the sexual problem is never externalized at all. The doctrine is orthodox Freudian. And there is no attempt to explain treatment technics or even to show how these particular cases were treated. Thus the book has a very limited value indeed, being useless to the non-psychiatrist; and useful to the psychiatrist only as a presentation of 15 cases of women with externalized sexual problems.

HERBERT BOEHM, M.D.

Correlative Neuro-Anatomy and Functional Neurology. By Joseph J. McDonald, M.D., and Joseph G. Chusid, M.D. Pp. 263. Ed. 6. Los Altos, California, University Medical Publishers, 1952 ($4.00)

Neurology is the geometry of the body. In no other branch of human physiology and anatomy is function so beautifully geared into structure, and so ingeniously dependent on it. Any practitioner who wants to localize a central or peripheral nervous lesion needs a clear picture of the stratification of the nervous system. This concise book furnishes such a picture—literally in its clean cut, legible line drawings; figuratively in its lucid text. Included is a compact review of the embryology of the nervous system, a systematic analysis of the structure and function of each major component, and a miniature textbook of clinical neurology. Also included is a discussion of electromyography, electroencephalography, and neurophysiology.

The text is presented in crisp outline form. The index is profuse. The ring binding and soft covers are, perhaps, unfortunate, since a work like this may get rough usage. The general practitioner will find this book a sensible and workable guide to the elements of neuro-anatomy, neuro-physiology and clinical neurology.

WILLIAM S. SCHRAM, M.D.

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TUBERCULOSIS

ABSTRACTS

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TODAY'S TUBERCULOSIS PROBLEM IN ARIZONA, A STUDY OF PATIENTS' ORIGINS

By Eleanor C. Connolly and Martha Carr Jones, Statistical Service, National Tuberculosis Association, June, 1952.

Climate is not and never has been a substitute for hospital care in the treatment of tuberculosis and the delusion that it is, has cost many lives. Proof that this statement is still valid has been furnished by a study of the origins of tuberculous patients in Arizona initiated in the Fall of 1950 by the statistical service of the National Tuberculosis Association.

The study was exploratory and, of necessity, limited in scope. A complete assessment of the tuberculosis situation was impossible. Complete information is not available on the supposedly high but incompletely reported number of tuberculous patients in Arizona.

Except for the tuerculosis death rate, factual data on the tuberculosis control problem in Arizona are largely lacking. In 1950, Arizona's provisional death rate from tuberculosis was 68 per 100,000 population, the highest in the United States; this rate is almost double the recorded rate of nearby New Mexico—a state which has a significant amount of tuberculosis and many of the same problems as does Arizona. If the population of Arizona continues to expand—and there is every indication that it will—and if the tuberculous are not isolated, exposure to tuberculosis will continue to be a health hazard to everyone in this state.

The study of patients' origins was based on a review of the records of 1735 tuberculous patients under medical care in Phoenix and Tucson. Certain personal data, place and time of diagnosis, history of hospitalization, length of residence in Arizona, and welfare status were ascertained. Although the analysis was partial, the information acquired by means of this study helps to determine the character of the tuberculosis problem in Arizona. The records studied included an approximately equal number of patients receiving public and private medical care.

Only one-fourth of the patients whose records were reviewed were of Spanish descent. Most were among the public patients. Arizona's position as a newcomer among the states is reflected in the fact that only 11 per cent of all patients were natives of Arizona. Most of these were of Spanish descent. Of all the patients studied approximately one-third had lived in Arizona less than five years prior to 1951. On the other hand, one-third of those receiving public care and 13 per cent of the private patients had lived in the state at least 20 years.

More than half the patients studied had been definitely diagnosed tuberculous before coming to Arizona. Three-fourths of the patients under private medical supervision were diagnosed prior to arrival in the state; on the other hand, of those medically indigent persons treated by means of public funds, only one-third had been diagnosed outside Arizona. Illinois, Ohio, California, Texas, and Michigan contributed the largest number of known tuberculous patients to Arizona.

Forty per cent of the patients studied were diagnosed as tuberculous in Arizona; of this group, 38 per cent had lived in the state at least 20 years before they discovered they had the disease. Only one out of five of these patients was diagnosed within five years after his arrival in the state.

The majority of the patients diagnosed prior to arrival had been hospitalized in other states, and this is true of many more private patients than of those whose care is paid for by public funds. Of the patients hospitalized elsewhere, 40 per cent came to Arizona less than a year after leaving tuberculosis hospitals.

Of the patients under public care for tuberculosis, more than half had sought aid from public or private welfare agencies or from both. More than half the patients whose records were reviewed had active tuberculosis at the time of the study; of those whose stage of disease was known, the great majority were diagnosed as far advanced, while only six per cent had minimal tuberculosis.

The large Spanish and Indian groups in the state plus a focus of infection among persons of Anglo-American nationality, some of it imported years ago and some of recent origin, produce an extremely high prevalence of tuberculosis in the state. This tuberculosis problem cannot be controlled with the present diagnostic and treatment facilities and the small number of available beds—523 exclusive of those in federal hospitals.

Unfortunately for Arizona, the state will probably always attract the "respiratory cripple" since its climate enables him to live more easily if not unduly harassed by economic problems. The numerous individuals with active and arrested disease who live there may always constitute a focus of potential infection out of proportion to that in other states. Moreover the indigenous Spanish and Indian groups, apparently with high susceptibility to tuberculosis, are themselves large enough to account for Arizona's high prevalence of tuberculosis.

No state can afford to ignore a troublesome situation because it is partially caused by persons who did not originate there. It is not possible to trace the antecedents of every patient for generations in order to place the responsibility for his disease in another state; in fact, according to this report, almost 40 per cent of the persons diagnosed inside Arizona had lived in the state 20 or more years.

The ingrained though erroneous conviction of many Arizona residents that tuberculosis does not affect the state's indigenous population has led to an unusual situation, in that the state does not provide hospital and other public health facilities for even its own tuberculous residents, to say nothing of the numerous visitors, sick and well, who are attracted to the state as a result of exploitation of the mild climate.

Every state has an obligation to protect all its citizens from persons with active disease, whether they are residents or non-residents. Arizona today needs as a minimum at least 1000 additional beds for tuberculous patients, no matter what standard of hospitalization is applied.

It is obvious that the program of education for the general public has failed to convince a great many persons that tuberculosis is a disease which is best treated in hospitals and not by climate. One wonders whether the education of individual patients by their own physicians is as thorough as it should be.

A vigorous program of general education concerning the ineffectiveness of climate as a cure for tuberculosis should be carried on by public and voluntary agencies, notably the National Tuberculosis Association and its constituent associations. Such a campaign should be directed not only to the American population at large, but to welfare agencies throughout the country, both public and private, and to the medical profession as well. It should be emphasized by every possible means that the man or woman with active tuberculosis cannot substitute climate for hospital care without grave danger to himself and those in contact with him.

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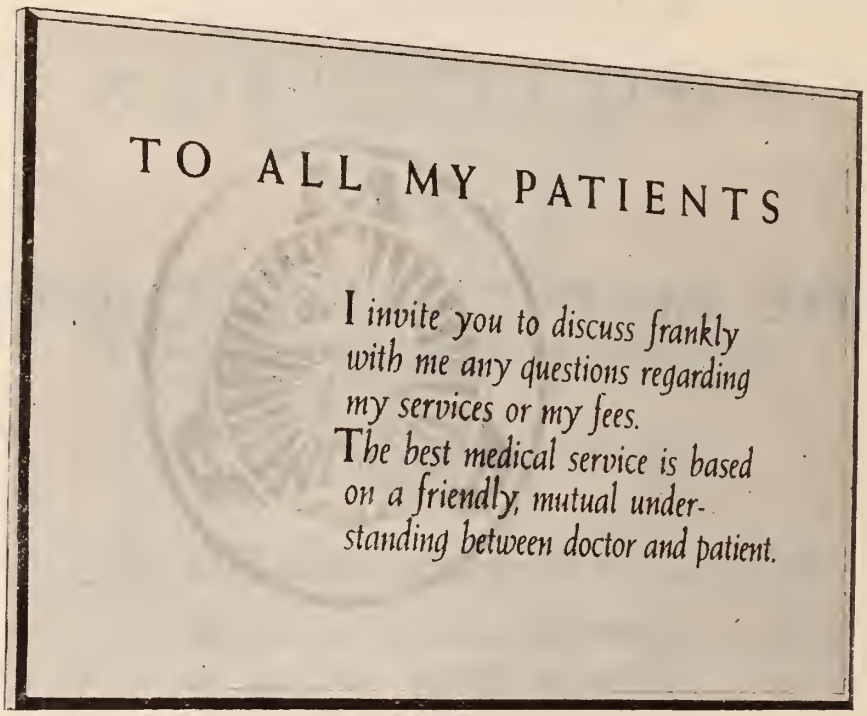
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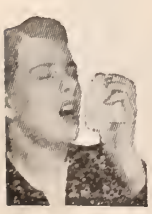
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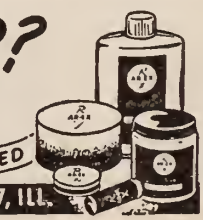
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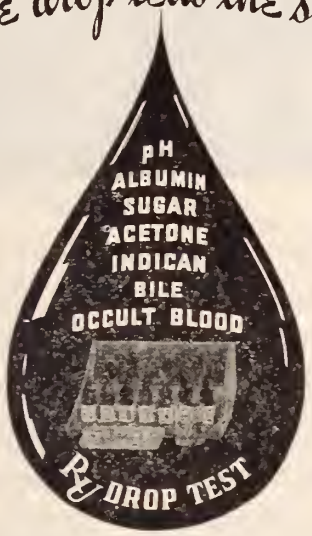
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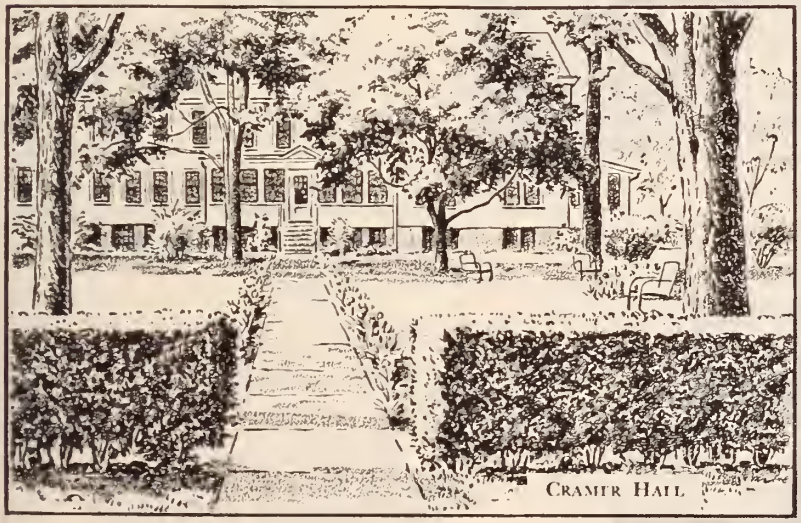
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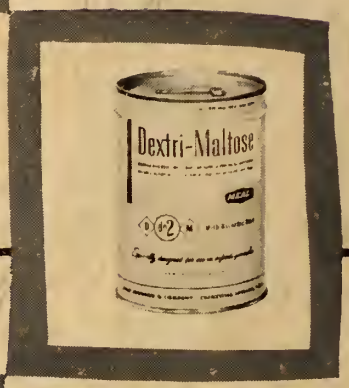
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CONTENTS—Pages 41 to 86

EDITORIALS— Page

PRESIDENT'S MESSAGE 41

TREATMENT OF STUTTERING 42

HEPATIC HYPOGLYCEMIA 43

ORIGINAL ARTICLES—

CARBOHYDRATE DISTURBANCES IN LIVER DISEASE—Carroll M. Leevy, M.D., William O'Connell, M.D., and Thomas J. White, M.D., Jersey City, N. J. 44

EVALUATION OF FUNCTIONAL MURMURS IN CHILDREN—Paul A. Kearney, M.D., Newark, N. J. 50

ATAXIC CEREBRAL PALSY WITH AKINETIC SEIZURES—Sidney Keats, M.D., Newark, N. J. 53

IT'S NICE MONEY IF YOU CAN GET IT—Nicholas G. Demy, M.D., Plainfield, N. J. 55

HODGKIN'S DISEASE IN A NEGRO BOY—F. Clyde Bowers, M.D., Mendham, N. J., and Albert Abraham, M.D., Morristown, N. J. 60

CARDIOVASCULAR SURGERY AT ST. MICHAEL'S HOSPITAL—Anthony D. Crecca, M.D., John J. McGuire, M.D., and Nicholas A. Antonius, M.D., Newark, N. J. 62

ORIGINAL ARTICLES— Page

THE NATURE OF PSYCHOTHERAPY—Alfred Bronner, M.D., Passaic, N. J. 68

PREGNANCY COMPLICATED BY DIAPHRAGMATIC HERNIA—Herman Levy, M.D., Passaic, N. J. 72

STATE ACTIVITIES—

Allergy Society Meeting 49

Sterility Congress 59

Wills Eye Hospital Meeting 71

Judicial Council: "On Fee Splitting" 74

1953 Membership Directory 75

Auto License Information 75

Revised Disability Benefits Form 75

Proposed Constitutional Amendment 76

Ophthalmology-Otolaryngology Meeting 76

MEDICAL-SURGICAL PLAN 77

PUBLIC HEALTH NEWS 78

OBITUARIES 79

COUNTY SOCIETY REPORTS 80

WOMAN'S AUXILIARY 82

BOOK REVIEWS 83

TUBERCULOSIS ABSTRACTS 85

Roster of Officers and Committee Chairmen, Advertising page 3A

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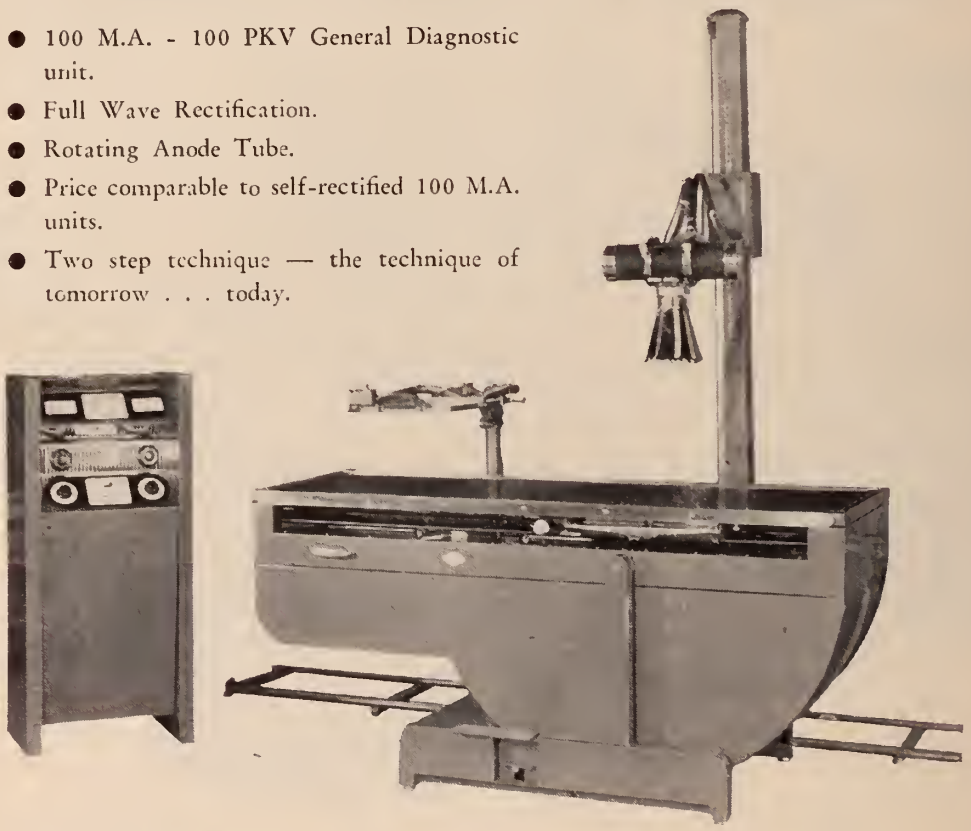
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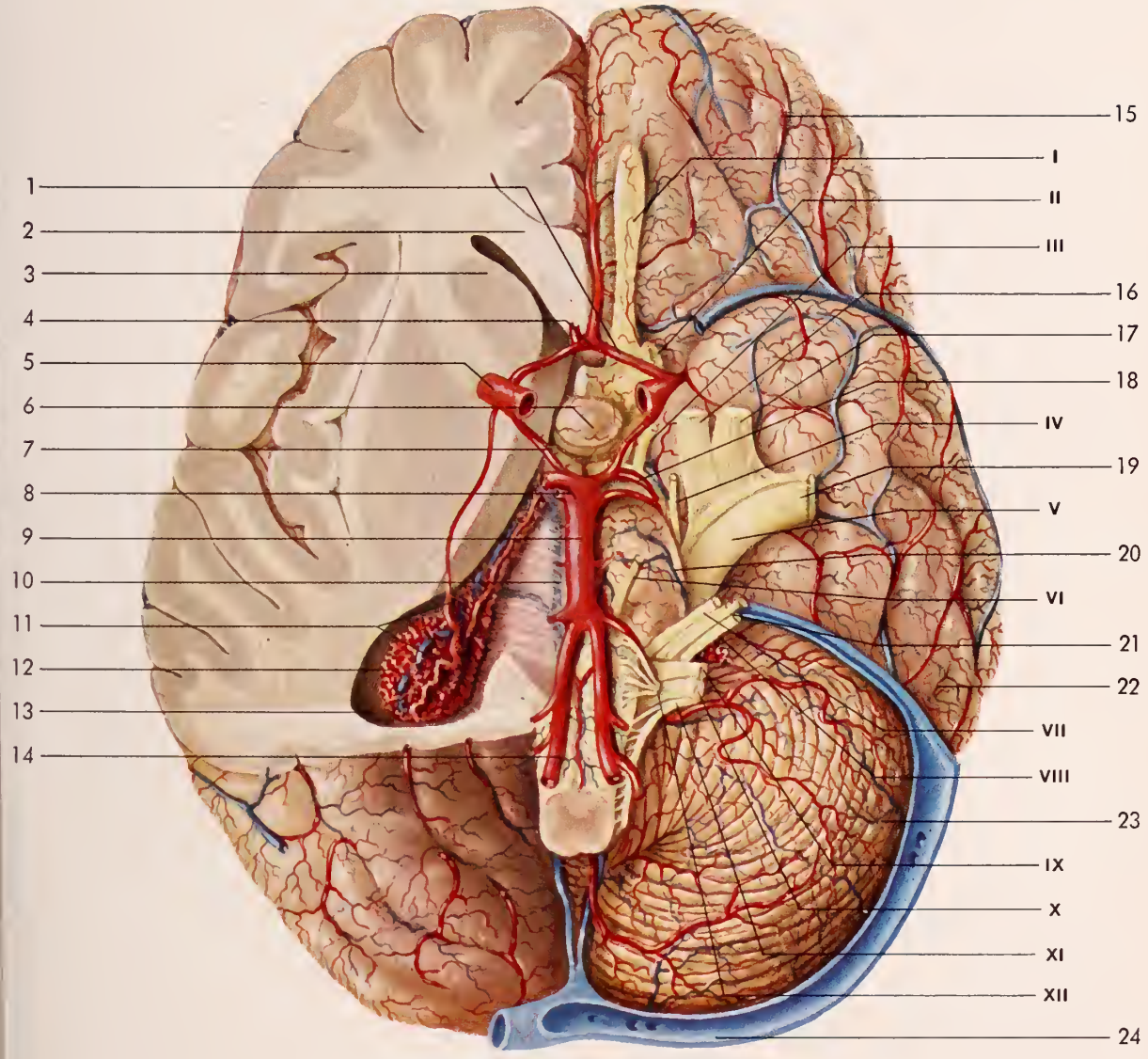
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2. Trunk of corpus callosum
3. Head of caudate nucleus
4. Anterior communicating artery
5. Middle cerebral artery
6. Hypophysis
7. Posterior communicating artery
8. Superior cerebellar artery
9. Basilar artery
10. Internal cerebral vein
11. Choroid artery and vein
12. Choroid plexus of lateral ventricle
13. Inferior cornu of lateral ventricle
14. Vertebral artery
15. Frontal lobe
16. Ophthalmic nerve
17. Maxillary nerve
18. Posterior cerebral artery
19. Mandibular nerve
20. Pons
21. Intermediate nerve
22. Temporal lobe
23. Cerebellum
24. Left transverse sinus

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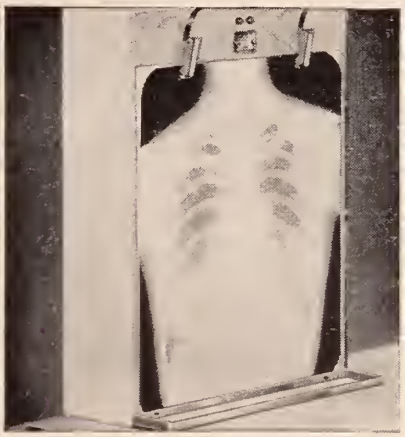
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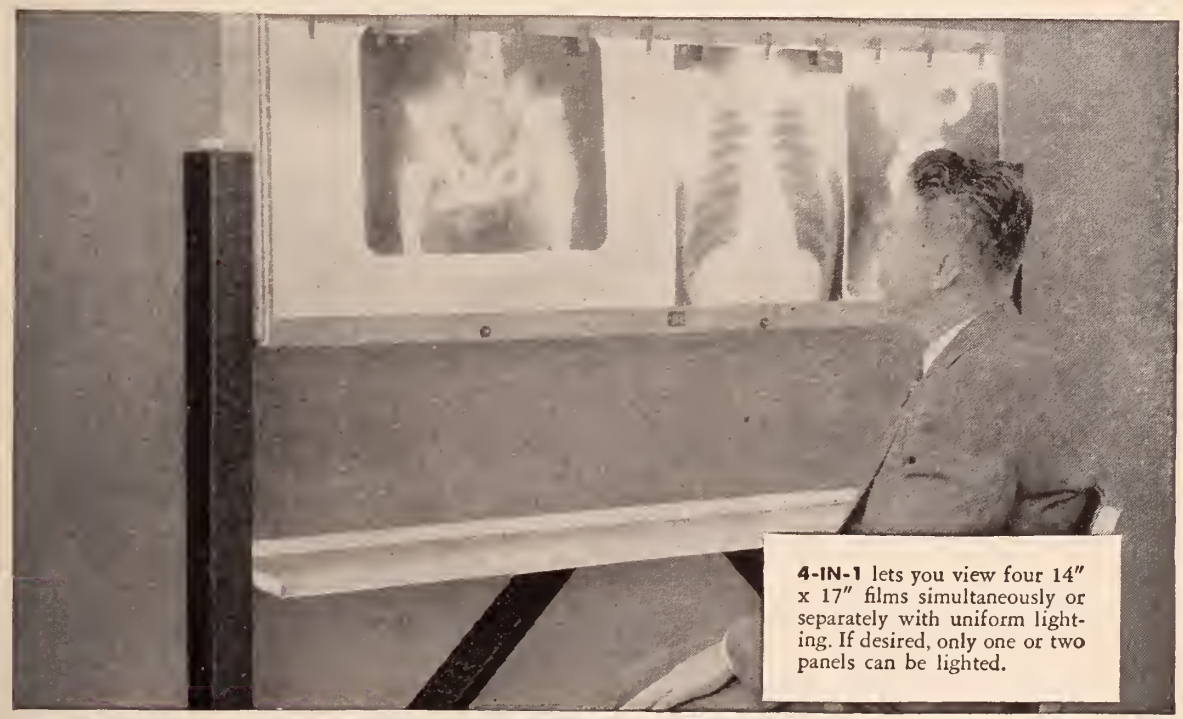
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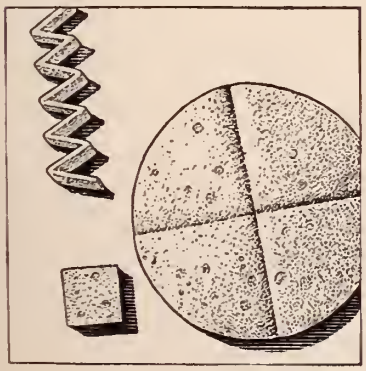
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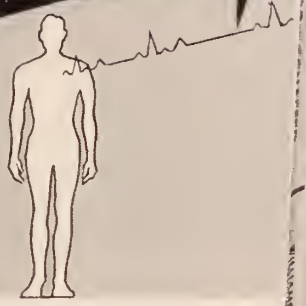
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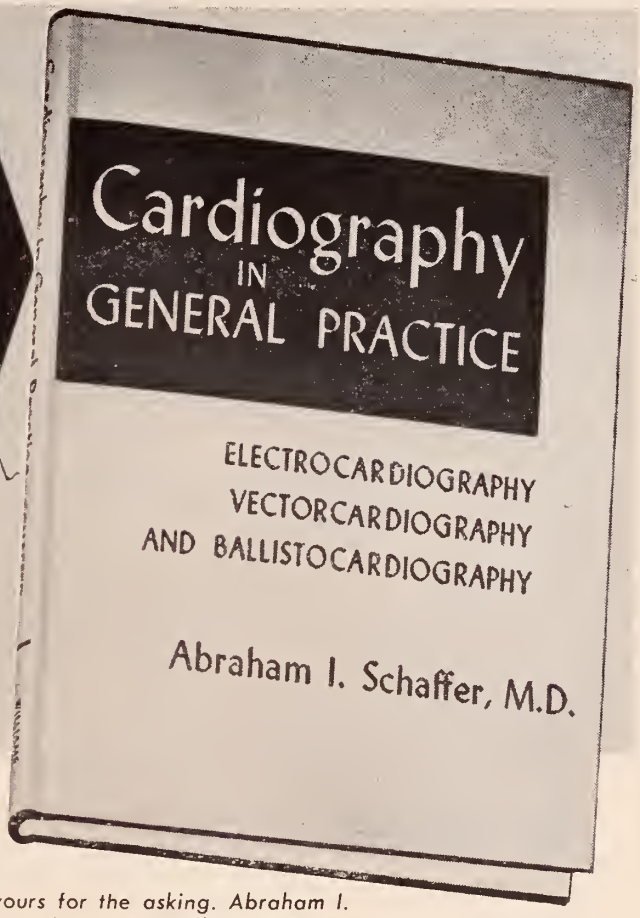
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1. Humphreys, P., et al.: Angiology 3:1 (Feb.) 1952.
2. Plotz, M.: N.Y. State J. Med. 52:2012 (Aug. 15) 1952.

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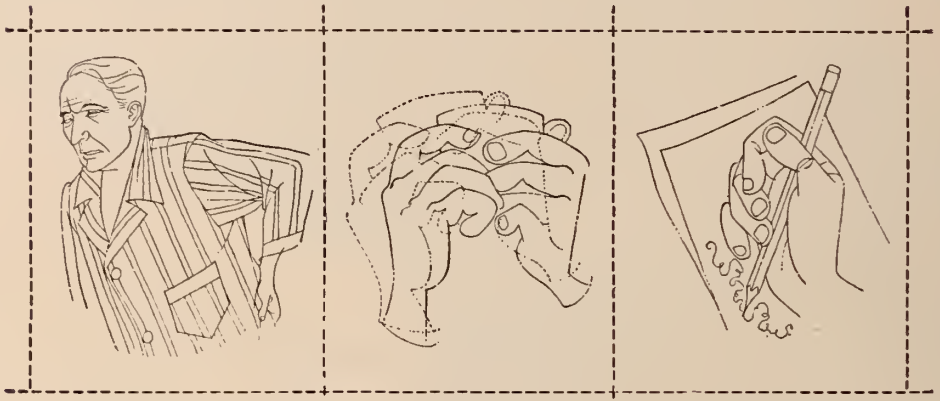


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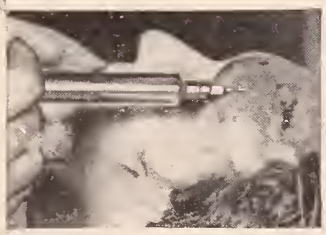
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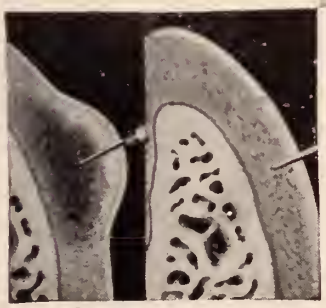
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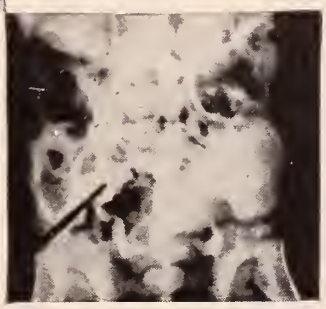
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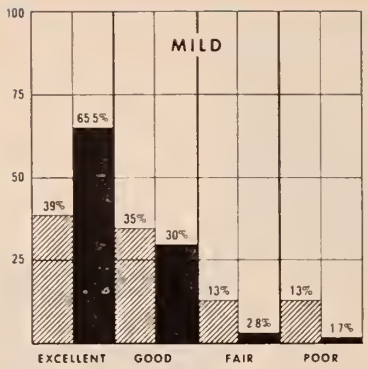
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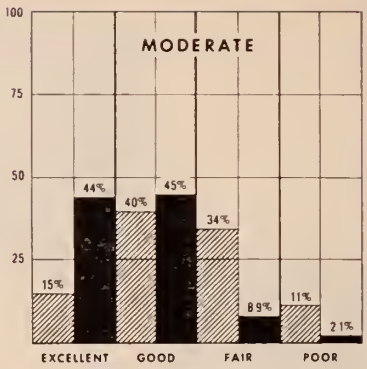
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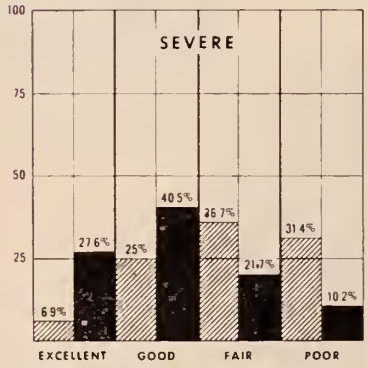
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PRESIDENT'S MESSAGE

MEDICINE'S GREAT PROBLEM

One of the most pressing problems facing the medical profession today is the care of the chronically ill. As physicians, we know that we must seek its solution along with social and welfare agencies. The number of people who are chronically ill is much too large—one out of six will eventually fall into this category.

Many of us think that only the aged can have a long term illness. This is not so. Almost forty per cent of the chronically ill are children or young adults. Sickness has no respect for age, sex or the financial status of anyone.

Our Governor has created a Division of Chronic Illness Control of the Department of Health. Last month he called a meeting in Trenton of all groups concerned with the solution of this problem. Almost eight hundred people representing the voluntary and professional agencies in the state attended the session and heard experts who came from various parts of the country discuss all aspects of long term illness and offer suggestions that might help in our future planning.

About five years ago the Essex County Service for the Chronically Ill was established by the Essex County Medical Society. Realizing that medical care was only one part of the problem, the aid of many social and welfare agencies was solicited. Funds for maintaining the Service were made available from the National Society for Infantile Paralysis, the New Jersey Division of the American Cancer Society, the Essex County Tuberculosis League, the New Jersey Heart Association, the New Jersey Society for Crippled Children and Adults, the Community Chest of Newark, and a large sustaining membership. An executive officer was secured and provided with a small operating staff. In the beginning a survey was made of the number of chronically ill in the county and their needs. Activi-

ties were directed to supplying information to the many people who had the responsibility of caring for their chronically incapacitated relatives.

In a short time the trustees of the Service realized that they could contribute greatly to the comfort and needs of these ill patients by offering a Homemaker's Service. This consisted of supplying a trained worker to assist in the domestic problems which are so acute when a member of the family cannot assume his responsibilities in the home situation. The opportunity of having a homemaker at a reasonable cost, who helps out as a good neighbor did in the past, has brought immense relief and has enabled many of these worthy people to remain amid the home-like atmosphere which is not often available at our institutions.

Every county medical society can and should embark on such a program. Our friendly welfare and social agencies and our many civic and community leaders are eager to help if they know the needs and have the stimulation which we alone can give.

Here again is an opportunity for you, Doctor, to present a positive program to the community in which you practice. It will help to solve in a definite way Medicine's Great Problem.

HARROLD A. MURRAY, M.D.

TREATMENT OF STUTTERING

Stuttering, which is primarily a psychologic and emotional problem, in most cases has its onset between the ages of two and four. In the older child stuttering is kept alive by memories, fears and anxieties which remain, and is perpetuated by the fear of stuttering itself. For this reason, treatment of the older child or adult is frequently unfruitful. However, if treatment is begun early results are quite different, and often successful. At this age, therapeutic approach is directed toward the emotional and personality problems of the child. Drs. Glasner and Dahl* have described the psychogenesis and treatment of stuttering in a recent report.

In the preschool child, stuttering is marked by a rapid, compulsive type speech, with obvious signs of emotional tension. There is marked hesitation and secondary features such as gasping, eye blinking, foot stamping and word substitutions are common. The pitch level is higher, and one is aware of feelings of anxiety in the child who is speaking. Treatment depends on altering the emotional pressures or inner unrest, so that speech can become more relaxed.

The first step in treatment is to obtain a thorough history to uncover the possible sources of tension, unrest, and insecurity. The child is then given a careful psychometric and psychologic evaluation. Such studies show that these children appear inhibited and uncomfortable. Their interest span is short, and aggressiveness is exhibited in a guarded manner, if at all directly.

Next the problem is discussed at length with the parents, as it is essential for them to understand the emotional tensions that underly this manifestation of childhood anxiety.

The mother's role in therapy must be emphasized. Mothers of stutterers, whether aware of it or not, are equally highstrung, nervous, and impatient. They have been found to be rigid, domineering, perfectionist, overanxious and overprotective of their children. The child's improvement is directly related to the mother's ability to understand her own temperament and to respect the child as an individual, rather than as the embodiment of her own standards.

Improvement in these youngsters is never manifested solely in their speech.

*Glasner, P. J. and Dahl, M. F.: Stuttering—A Prophylactic Program for its Control. Am. J. Pub. Health, September 1952.

They become robust, noisy, friendly, and extrovert. They are more relaxed in play, and fearfulness disappears. Eventually the total picture of the parents, child and environment takes on a wholesome, happy, relaxed atmosphere.

It is gratifying to see what progress is being made in the management of this disturbing childhood disability, and to realize that if it is treated early enough a lifetime of embarrassment and handicap may be prevented.

HEPATIC HYPOGLYCEMIA

On page 44 of this issue of The Journal Leevy, O'Connell and White present a comprehensive discussion of the relation of carbohydrate metabolism to liver disease. In connection with this topic a recent report has appeared concerning the hypoglycemic effects of hepatic disease. Mellinkoff and Tumulty [1] have collected twenty cases of liver disease from the Johns Hopkins Hospital in which hypoglycemia occurred at one time or another. It was not associated with any specific liver pathology, but occurred in viral hepatitis, portal (Laënnec's) cirrhosis, chronic passive congestion, biliary cirrhosis, fatty infiltration and primary hepatoma. In some cases transient hypoglycemia was relatively mild, while in others it contributed to death. In none of these cases (13 were autopsied) were other causes of hypoglycemia found, such as islet-cell tumor of the pancreas, hyperplasia of the islands of Langerhans, adrenal or pituitary insufficiency, or hypothyroidism.

The mechanism of hepatic hypoglycemia is not clear, but may be related to the inability of the liver to store glycogen, or to break glycogen down to glucose, or to produce glucose from noncarbohydrate precursors.

Many of the cases described had clearly evident clinical manifestations of liver damage, but in a few the symptoms of hypoglycemia were most prominent, and first suggested the presence of significant liver disease. Hypoglycemia of hepatic origin may appear episodically, or be fairly constant. In mild form it produces nervousness, increased sweating or palpitations, but in more severe states it may lead to bizarre, psychotic behavior, convulsions, shock or coma. No definite relation could be found between the degree of clinically detected liver damage and the blood sugar level.

Of special significance were the five patients in whom hepatic hypoglycemia occurred while in congestive failure. This has not been previously emphasized, but deserves the attention of all physicians, especially cardiologists. Chronic passive congestion produces enough liver damage so that when poor appetite and inadequate food intake are added, as commonly occurs in pronounced cardiac failure, the stage is set for hepatic hypoglycemia. Palpitations, sweating and unusual behavior may represent manifestations of cerebral anoxia due to heart failure, but they may also be due to hypoglycemia of hepatic origin. Differentiation is easily made by intravenous administration of small volumes of concentrated glucose, and this simple procedure will be of therapeutic as well as diagnostic value in such cases. Bearing in mind that prolonged hypoglycemia will produce irreversible cerebral damage, this possibility should be considered in managing patients with chronic congestive failure. The same physiologic principle applies to the management of patients with liver disease who present symptoms suggestive of hypoglycemia, and should suggest a blood sugar determination followed by treatment with intravenous glucose. By so doing, some cases of so-called cholemia, or hepatic coma, may respond dramatically and a fatal outcome may be avoided.

1. Mellinkoff, S. M. and Tumulty, P. A.: Hepatic Hypoglycemia—Its Occurrence in Congestive Heart Failure. New Eng. J. Med. 247:745 (Nov. 13, 1952).

ORIGINAL ARTICLES

CARBOHYDRATE DISTURBANCES IN LIVER DISEASE*

CARROLL M. LEEVY, M.D., WILLIAM O'CONNELL, M.D., and THOMAS J. WHITE, M.D., Jersey City, N. J.

The relation of liver disease to abnormalities of carbohydrate metabolism, with tests for their detection, is clearly presented. Of special significance is the discussion of hepatogenic hyperglycemia and diabetes, with criteria outlined for differentiating these two confusing entities.

The interdependence of normal carbohydrate metabolism and a properly functioning liver is well established. In health, homeostasis of blood sugar depends on the integrity of the liver.[1] Dysfunction of the liver may lead to impaired glycogen storage,[2] decreased galactose, levulose or lactic acid tolerance,[3] abnormal glucose tolerance,[4] hypoglycemia,[5] or hyperglycemia.[6] Carbohydrate imbalance is associated with hepatic changes in diabetes mellitus,[7] glycogen storage disease,[8] and galactosemia.[9] This discussion is confined to the usefulness of the glycogen storage, galactose tolerance and glucose tolerance tests in liver disease with notes on blood sugar changes in hepatic disorders.

GLYCOGEN STORAGE

The liver transforms extra dietary glucose and the glucose resulting from gluconeogenesis of protein into glycogen. This glycogen is added to that formed from lactic acid and stored. A paucity or excess liver glycogen interferes with hepatic function.[10]

In health, 0.01 cc. of 1:1000 epinephrine per kilogram of body weight intramuscularly will cause a rise of blood sugar of 40 mg. per cent or more. This effect has been attributed to an increase in hepatic glycogenolysis,[11] although hyperglycemia may be due to inhibition of peripheral utilization of glucose,[12] activation of the pituitary-adrenal system,[13] muscle glycogenolysis or the general calorigenic activity of epinephrine.[14] Use of this test as a measure of glycogen storage is based upon the observed increase of hepatic vein glucose with administration of epinephrine,[15] a subnormal blood sugar rise in patients with liver injury, and the absence of a response in hepatectomized animals.[16]

Results of the epinephrine test may be altered by variation of epinephrine to norepinephrine content of commercial solutions, absorption and state of the circulation, frequency of tests,[17] previous diet and muscular activity. To measure glycogen storage capacity accurately, patients should be on a diet of 200 Grams of carbohydrate for 72 hours before the test is performed.

This test is useful in the diagnostic study of liver disease. Normal patients and those with uncomplicated posthepatic jaundice and patchy neoplastic infiltration of the liver, with good nutritional states, have blood sugar increments ranging from 35 mg. per cent to 50 mg. per cent over the period of one hour. Uncontrolled diabetes is associated with a variable increase of sugar; in some instances being low and in others ranging as high as 170 mg. per cent. Hepatic congestion due to heart failure is associated with a decrease in epinephrine response which is proportional to the degree of congestion (Table 1).

TABLE I
GLYCOGEN STORAGE VARIANTS IN DISEASE

Disease	No. of Studies	Maximal Rise of Blood Sugar Range	Average
Normal	20	35-50	40 mg.%
Uncomplicated metastatic carcinoma	12	25-46	35 mg.%
Hepatic congestion	24	14-26	18 mg.%
Diabetes mellitus uncontrolled	18	20-170	70 mg.%
Uncomplicated obstructive jaundice	15	35-55	42 mg.%
Severe acute liver disease	21	4-20	11 mg.%
Severe chronic liver disease	23	8-25	16 mg.%

* From the Department of Medicine, Jersey City Medical Center.

There is a correlation between the clinical severity of the liver disease and the epinephrine test, and between other biochemical functions and this test (Table 2). Complaints of malaise and ease of fatigue are conspicuous symptoms in patients with poor response to epinephrine.

TABLE II.

Correlation of Glycogen Storage and other Biochemical Functions in Histologically Proved Liver Disease

Test	Percentage Correlation
B.S.P. excretion	94%
Cephalin flocculation	81%
Cholesterol-ester ratio	73%
Albumin-globulin ratio	69%

The major value of a measure of glycogen storage capacity in liver disease appears to be its use as a guide to therapy. Protein anabolism, necessary for liver tissue regrowth, proceeds maximally only with normal carbohydrate metabolism. Therefore, return of glycogen stores to normal is essential. In hepatic disease, a high carbohydrate, high protein diet usually leads to normal glycogen stores. The following case history is illustrative:

Case 1. A 37-year old man was hospitalized because of hematemesis. Three days after admission, he developed delirium tremens. Examination revealed an enlarged and tender liver 6 centimeters below the costal cage. Biochemical liver function studies showed an abnormal bromsulfalein, hyperglobulinemia and poor glycogen storage (Table 3). Needle biopsy revealed marked fatty infiltration of the liver. The patient was given bed rest with a diet of 350 Grams of carbohydrate, 125 Grams of protein and 100 Grams of fat for one month. At this time biochemical functions and carbohydrate functions were improved. Repeat needle biopsy showed very little fat.

TABLE III.

Improvement of Glycogen Storage Capacity and other Laboratory Studies on Bed Rest with a High Carbohydrate, High Protein Diet

Biochemical Function	7/25/51	8/8/51	9/5/51
Serum Bilirubin	0.7	0.1	0.1
Alkaline Phos.	1.9	—	1.0
B.S.P. Ret.	15.5	7.5	0
Cholesterol	246	260	334
Cholest. Esters	134	174	213
Albumin	2.8	3.1	3.6
Globulin	3.9	4.4	4.6
Ceph. Flocc.	2+	neg.	neg.
Thymol Turbidity	1	1.0	1.5
Prothrombin	14.8/14.8	14.0/13.9	14.1/14.7
Glycogen Storage	7	55	54
Needle Biopsy			
Fibrosis	0	0	0
Fat	3+	2+	1+

Intravenous glucose added to rest and diet is notably associated with good clinical results. This may be related to improved glycogen stores:

Case 2. A 28-year old man was hospitalized because of jaundice of 3 weeks' duration. Four weeks before admission he had a respiratory infection with malaise and ease of fatigue. The patient was acutely ill with marked icterus, an enlarged and tender liver 4 centimeters below the costal cage and spider angiomata. Biochemical liver function studies revealed a serum bilirubin of 22.6 mg.%, alkaline phosphatase 8.6 units, serum cholesterol 253 mg.%, cholesterol esters 52 mg.%, serum albumin 3.7gm.%, serum globulin 3.1 gm.%, cephalin flocculation 3+, thymol turbidity 10.0 units, glycogen storage 18 mg.%. A needle biopsy was characteristic of viral hepatitis. The patient felt quite weak and was anorexic. He was put on bed rest, a general hepatic diet and 200 Grams of glucose intravenously each day, with a rise in glycogen storage to 38 mg.% within 14 days. During this period he became asymptomatic. Repeat liver function studies at this time showed a serum bilirubin of 11.0 mg.%, alkaline phosphatase 4.5 units, serum cholesterol 238 mg.%, cholesterol esters 110 mg.%, serum albumin 3.42 mg.%, serum globulin 2.39 mg.%, cephalin flocculation 1+, thymol turbidity 6.0 units. Clinical and biochemical improvement continued until he had no residual evidence of liver disease.

Studies are in progress to evaluate the usefulness of adrenal steroids in improving glycogen storage capacity. Lipo-adrenal extract† was given to 10 patients with severe liver disease in 5 cubic centimeter doses daily for 14 days without changing their glycogen storage capacity. Cortisone‡ was given in doses of 100 milligrams daily for 14 days to eight patients with similar degrees of hepatic decompensation and was associated with improvement in glycogen storage capacity in three patients.

GALACTOSE TOLERANCE

Popularity of the galactose tolerance test as a measure of liver function has fluctuated greatly since its introduction. The intravenous test is desirable to avoid the influence of gastrointestinal absorption, thyroid function and renal excretion.

The intermediate metabolism leading to conversion of galactose to glucose and glycogen has not been completely elucidated. Galactose may be transformed to glucose and then syn-

†Furnished by Upjohn Co., Kalamazoo, Michigan.
‡Furnished by Merck & Co., Rahway, N. J.

thesized into glycogen; directly converted into glycogen; or broken down to three carbon compounds which are polymerized into glycogen.[18] The liver is the key organ in this process and through its activity, galactose is rapidly taken out of the blood. Serial determinations show progressive decrease of blood galactose following its infusion in healthy subjects. Liver dysfunction decreases the capacity to convert galactose to glycogen and galactose concentrations remain high for longer periods.

The total concentration of galactose at the end of a period, or its rate of decrease, may be employed as a test of the functional capacity of the liver. In normal subjects, no galactose is found in the blood stream at the end of 75 minutes, there being a fall of 5 to 9.2 mg. per cent of galactose over each 15 minute period.[19] In patients with hepatitis, active cirrhosis and fatty liver, there are varying degrees of galactose retention. After treatment, the galactose tolerance improves. This test correlates well with the histological state and other biochemical studies. Its chief value has been in the differential diagnosis of jaundice and in this respect furnishes more information than the other carbohydrate function tests. The following case history illustrates disturbed galactose tolerance as the chief metabolic change in hepatocellular disease:

Case 3. A 63-year old man was hospitalized because of jaundice associated with anorexia and general malaise. Nine weeks prior to admission, he had a suprapubic prostatectomy at which time he received blood and plasma. He had been well until one week before readmission when he developed anorexia, nausea, vomiting and diarrhea. This was followed by jaundice, dark urine and light stools. Physical examination revealed no abnormalities except for the icterus. His liver and spleen were not palpable. His red blood cell count was 4.7 million with a white blood cell count of 8,400. Urinalysis was normal except for biliuria and an increase of urobilinogen. A serum bilirubin was 18.4 mg.%, alkaline phosphatase 8.2 units, serum cholesterol 342 mg.%, cholesterol esters 119 mg.%, serum albumin 3.36 gm.%, serum globulin 2.84 gm.%, cephalin flocculation 1+, thymol turbidity 3.0 units, prothrombin time 14.6 seconds with a control of 13.0 seconds. In the galactose tolerance test 36 mg.% of galactose remained in the blood at 75 minutes. The glycogen storage test showed a rise in blood sugar of 26 mg.% and the glucose tolerance curve was flat. A needle biopsy was consistent with a viral hepatitis. On bed rest and a diet of 350 Grams of carbohydrate, 80 Grams of protein and 100 Grams of fat, supplemented with glucose infusions, his symptoms disappeared. Jaundice cleared and biochemical abnormalities returned to normal.

GLUCOSE TOLERANCE

Glucose tolerance tests are important in studies of liver disease associated with hyperglycemia or hypoglycemia. The normal glucose tolerance curve depends on the integrity of the liver, a quantitative relationship existing between the amount of functioning liver parenchyma and tolerance to glucose. Many technics are available for studying glucose tolerance. Intravenous glucose tolerance tests have resulted in three general patterns in liver disease, a flat curve in 30 per cent, a diabetic-like curve in 18 per cent, and a normal curve in 52 per cent of non-selected patients with liver disease. Patients with decompensated liver disease frequently had a flat or diabetic curve, whereas, normal curves were present in compensated liver disease. The glucose tolerance test with simultaneous inorganic phosphorous determinations may be useful in differentiating the diabetic-like curve seen in liver disease from that due to diabetes mellitus.

In healthy subjects, serum phosphorus decreases with infusion of glucose due to its use in the phosphorylating mechanism. There is little or no reduction in phosphorous levels with infusion of glucose in diabetes mellitus where phosphorylation does not proceed normally. Patients with liver disease usually have responses similar to healthy subjects. With fasting hyperglycemia associated with liver disease, there has been a variable response (Table 4) which prevents the use of this test in deciding the etiologic relationship[6] of the hyperglycemia and liver disease.[20]

TABLE 4
RESPONSE OF SERUM ORGANIC PHOSPHORUS TO INFUSION OF GLUCOSE

	Change in Serum Phosphorus
Normal Patients	0.5—1.5 mg.%
Diabetes Mellitus	0. —0.3 mg.%
Liver Disease with Normal Glucose Tolerance	0.5—1.5 mg.%
Liver Disease with Normal Fasting Blood Sugar and Diabetic Glucose Tolerance	0.5—1.5 mg.%
Liver Disease with Fasting Hyperglycemia	0. —1.5 mg.%

BLOOD SUGAR DISTURBANCES IN LIVER DISEASE

Hypoglycemia is classically associated with severe liver disease. Its clinical occurrence is relatively rare today. This is attributable to high carbohydrate intakes in suspected liver disease. Exercise, excess work or diminished carbohydrate intake will lead to low blood sugars in most patients with moderately advanced liver disease. Failure to maintain high carbohydrate intakes invariably leads to hypoglycemia in patients with hepatic fetor or hepatic coma.

Hypoglycemia of a functional variety, and that due to pituitary, adrenal or pancreatic disease may be complicated by liver injury due to poor nutrition or other causes. Usually, little difficulty is encountered in differentiating the endocrine causes of hypoglycemia from that due to liver disease. Diagnostic problems may occasionally arise as in one patient observed with a pancreatic adenoma and severe cholangitis, both of which contributed to a low blood sugar.

Ten patients with liver disease observed with symptoms of hypoglycemia as the major presenting factor of their illness (Table 5), had blood sugar levels which varied from 27 mg. per cent to 63 mg. per cent. This group of patients may require heroic therapy to maintain blood sugar levels. The following case history is illustrative:

Case 4. A 40-year old housewife was admitted in coma. She had eaten little food and consumed one to two pints of whiskey daily over a period of 8 months. Physical examination revealed hepatomegaly 7 cm. below the costal cage. Her red blood cell count was 3.5 million, Hbg. 70%. W.B.C. 17,200, differential 92% neutrophiles and 8% lymphocytes. Acetonuria was present, without diacetic acid. A blood sugar was 35 mg.%. N.P.N. 35.5, CO_2 combining power 18.6 vol.%, with a blood pH 7.25. 100 Grams of hypertonic glucose intravenously promptly returned her sensorium to normal. Biochemical liver function studies revealed a serum bilirubin of 1.4 mg.%, bromsulfalein 0%, serum cholesterol 143 mg.%, cholesterol esters 74 mg.%, prothrombin normal, serum albumin 3.09 gm.%, serum globulin 4.4 gm.%, cephalin flocculation 2+, thymol turbidity 4.0 units. A needle biopsy of the liver showed marked fatty infiltration. During the next six weeks she was given a diet of 350 Grams of carbohydrate, 125 Grams of protein and 100 Grams of fat. Serial glucose tolerance tests showed a disappearance of an initial diabetic-like curve. A repeat liver biopsy at the end of treatment showed no fat.

TABLE 5
HYPOGLYCEMIA DUE TO HEPATIC INSUFFICIENCY

Age	Sex	Histologic Diagnosis	Blood Sugar Level
42	F	Portal cirrhosis	37.6
40	F	Fatty liver	35
26	F	Fatty liver	35
64	M	Carcinoma	46
65	M	Portal cirrhosis	43
57	F	Viral hepatitis	63
22	M	Liver abscess	36
62	M	Portal cirrhosis	41
28	F	Viral hepatitis	27
34	F	Viral hepatitis	33

Hyperglycemia and liver disease are frequently found together. In most instances, the carbohydrate disturbance is the primary abnormality and liver changes are secondary to poor nutrition, heart failure, malignancy, viral hepatitis or biliary tract disease. Occasionally, a common factor as pancreatitis or hemochromatosis simultaneously produce liver changes and a carbohydrate disturbance.[21]

Rarely, liver disease causes hyperglycemia by interfering with hepatic homeostasis of blood sugar or unmasking a relative insulin insufficiency.

The incidence and significance of hepatic dysfunction in diabetes varies with the nutritional background[7] of the patient. Age, sex and duration of diabetes has no effect on the frequency of liver involvement; gross dietary and insulin insufficiency is accompanied by liver dysfunction more frequently. Diabetes with liver abnormalities tends to be insulin insensitive.[22] Whether this is an inherent characteristic of a type of diabetes or is attributable to metabolic changes resulting from poor control is problematic. Complications of diabetes are associated with a high incidence of liver changes, increasing to 70 per cent with tuberculosis and gangrene.

Twenty patients with diabetes mellitus and complicating liver disease have been followed over a period of 5 years. Two had viral hepatitis, eight had fatty livers, nine had portal cirrhosis and one had biliary cirrhosis. During the acute stages of their liver disease, insulin requirements increased in eight patients, were reduced in five patients and were not significantly changed in seven patients. Liver change

due to nutritional deficiency was associated with a high incidence of diabetic complications, degenerative vascular disease being present in nine (53 per cent) patients, and peripheral neuropathy in five (29 per cent) patients. The following case history is illustrative of the diabetic patient with secondary liver disease:

Case 5. A 67-year old housewife was found to have diabetes in 1926. There were no physical abnormalities at this time. She was treated by her family physician with the diet popular during this period consisting of 100 Grams of carbohydrate, 60 Grams of protein and 50 Grams of fat, and given 30 units of insulin each day. She was first seen in the Jersey City Medical Center in 1935 because of decreased visual acuity, urinary frequency and thirst. Her diabetes had been poorly controlled since its recognition. Examination revealed bilateral chorioretinitis. Her diet was increased to 160 Grams of carbohydrate, 60 Grams of protein and 60 Grams of fat with 40 units of insulin daily.

She did not adhere to her therapeutic program and her retinopathy was progressive. In 1941 left retinal detachment occurred and during the ensuing 5 years she lost all of her vision. Her insulin requirements increased to 115 units daily.

In 1951 she was hospitalized because of progressive abdominal swelling. Examination revealed liver enlargement 6 cm. below the costal cage and ascites. A fasting blood sugar was 345 mg.% with a 4+ glycosuria. A serum bilirubin was 1.8 mg.%, alkaline phosphatase 8.8 units, bromsulfalein 36%, serum albumin 1.91 gm.%, serum globulin 3.59 gm.%, cephalin flocculation 4+, thymol turbidity 9.0 units, normal prothrombin response to Vitamin K. A galactose tolerance test showed 15 mg.% retained in 75 minutes, epinephrine caused a rise in blood sugar of 25 mg.%. A needle biopsy revealed marked portal cirrhosis. She was given a diet of 250 Grams of carbohydrate, 125 Grams of protein and 100 Grams of fat, multivitamins, 6 Grams of choline, and 108 units of insulin each day. On this regimen her ascites disappeared, blood sugar decreased to 140 mg.% and glycosuria was reduced to 1-2+. Repeat biochemical study after 4 weeks showed a rise of blood sugar of 50 mg.% following epinephrine, a serum bilirubin of 0.8 mg.%, bromsulfalein 8%, serum albumin 2.4 mg.%, serum globulin 3.2 mg.%, cephalin flocculation 2+.

The diabetic state seems to increase the susceptibility to liver injury. One patient with a family history of diabetes has been observed with a fatty liver which progressed to cirrhosis during a 4 year period of not receiving diabetic therapy.

Diabetes due to liver disease is difficult to prove. Ten patients observed with histories of chronic alcoholism and poor dietary habits prior to the appearance of a diabetic syndrome were treated with hepatic therapy without insulin with improvement in the hepatic status and disappearance of the hyperglycemia and glycosuria. Responses to treatment suggested liver disease produced hyperglycemia by interfering with blood sugar control in four patients and by the unmasking of a latent diabetes in four others.[6] The mechanism was obscure in two patients developing insulin resistant diabetes. Differentiating patients with hyperglycemia due to liver disease from those with diabetes mellitus and secondary liver disease is a major problem. Prolonged therapeutic observation is essential. The following case history is illustrative:

Case 6. A 52-year old man was hospitalized because of acute alcoholism and was found to have an enlarged liver. His blood pressure was normal. Chest and heart examination revealed no abnormalities. His fasting blood sugar was 96 mg.%, and he had no glycosuria. Biochemical liver function studies revealed a serum bilirubin of 3.6 mg.%, bromsulfalein 20%, serum cholesterol 415 mg.%, cholesterol esters 171 mg.%, serum albumin 2.84 gm.%, serum globulin 4.36 gm.%, cephalin flocculation 4+, thymol turbidity 6.0 units. He was discharged to the hepatic clinic but failed to report.

One year later, he was rehospitalized because of jaundice. He was found to have a blood sugar of 460 mg.%, a serum bilirubin of 11.3 mg.%, bromsulfalein 40%, serum albumin 2.31 gm.%, serum globulin 3.49 gm.%, cholesterol 188 mg.%, cholesterol esters 109 mg.%. A needle biopsy of the liver showed portal cirrhosis with marked fatty changes. 17-ketosteriods, serum amylase, blood eosinophiles, and basal metabolism tests were normal. On a hepatic regimen without insulin his jaundice disappeared and fasting blood sugars were gradually reduced over a 3 month period to 80 mg.%. A glucose tolerance test was normal at this time.

Proposed criteria for a diagnosis of hepatogenic diabetes include all of the following: (1) A history of exposure to hepatotoxins or liver injury prior to the appearance of the diabetic syndrome; (2) Physical, biochemical or histologic evidence of liver disease; (3) No familial history of diabetes nor history or clinical evidence of pancreatic, pituitary, adrenal or thyroid disease; (4) Disappearance of the hyperglycemia and glycosuria on hepatic therapy without insulin.

SUMMARY AND CONCLUSIONS

1. Carbohydrate tests are valuable in the study of patients with liver disease when correlated with other clinical data. The glycogen

storage test is useful in improving general diagnostic and therapeutic perspective. The intravenous galactose tolerance test is valuable in the study of the jaundiced patient. The intravenous glucose tolerance test, performed with simultaneous inorganic phosphorous studies, is helpful in the study of patients with blood sugar changes associated with liver disease.

2. Patients with liver disease may have a normal fasting blood sugar, hypoglycemia or hyperglycemia. Hypoglycemia usually responds readily to a high carbohydrate intake. Hyperglycemia due to diabetes mellitus requires insulin in addition to a proper diet. Blood sugar elevation due to hepatic disease may respond to a high carbohydrate, high protein diet without insulin.

Medical Center

A full bibliographic listing of 22 citations appears in the authors' reprints.

ALLERGY SOCIETY MEETING

The New Jersey Allergy Society will meet on Tuesday, February 17 at 8:45 p.m., at the Academy of Medicine of Northern New Jersey. Dr. Albert H. Rowe, Chief of Allergy at St. Mary's Hospital, San Francisco, California, author of several books on food allergy, and originator of the Rowe elimination diet, will discuss food allergy.

MEDICAL SOCIETY HISTORY

The Medical Society of the State of Pennsylvania has recently published its history from 1848 to 1948 in a book entitled "A Century of Medicine." Copies of this book ($5.00 each) may be purchased from the headquarters of the Pennsylvania Medical Society at 230 State Street, Harrisburg, Pa.

SUCCINYLCHOLINE IN ANESTHESIA

The ideal muscle relaxant in anesthesiology should have specificity and rapid onset of action, a readily controllable intensity, and a wide margin between muscular relaxation and respiratory arrest. There should also be rapid and complete recovery after cessation of its use. Agents hitherto used in surgical anesthesia fall short of these requirements in that they require three to eight minutes to achieve maximal effect, produce a variable degree of respiratory depression, or actual transient respiratory arrest. Salivation, excessive bronchial secretions, bronchospasm, tachycardia, hypotension and hypertension are other undesirable side actions. Some agents last but ten to thirty minutes, others produce occasional deep respiratory depression. Succinylcholine, given as a continuous intravenous infusion, has recently been described* as approaching the ideal muscle relaxant. It belongs to the "depolarizing" type of neuromuscular blocking agents, and has a short, intense, and reproducible effect.

Given as a continuous intravenous infusion in physiologic saline or in 5 per cent glucose in water, average dose 4.0 milligrams per minute, it was found to produce good muscular relaxation with less respiratory depression than with any other similar agent. The degree of relaxation could be changed in thirty seconds by changing the rate of flow. After the infusion was discontinued, its action disappeared within two to four minutes. Its major disadvantages are that it requires greater attention on the part of the anesthesiologist, and somewhat higher doses of sodium pentothal are required to maintain desired depths of anesthesia.

* Foldes, F. F., *et al.*: Succinylcholine: A New Approach to Muscular Relaxation in Anesthesiology. New England Journal of Medicine, 247:596 (October 16, 1952).

EVALUATION OF FUNCTIONAL MURMURS IN CHILDREN *

PAUL A. KEARNEY, M.D., Newark, N. J.

The distinction between organic and physiologic murmurs in children is a problem that besets pediatricians and cardiologists. In this article the common causes of organic murmurs are described and criteria outlined for their differentiation from the so-called "functional" murmur.

The differentiation between organic and physiologic murmurs is sometimes difficult. We assume that the term "functional murmur" applies only to those hearts in which structural valvular changes can be reasonably excluded and which are free of any disease, general or cardiac, that might cause a systolic murmur. The problem of functional murmurs has been unduly minimized. According to Wilson,[1] "Fifty per cent of average normal children present a systolic murmur on routine examination. In marked contrast is the reported incidence of organic heart disease of 0.5 per cent". It is obvious, therefore, that a large group of children present a diagnostic problem. Messeloff[2] states that 8 to 20 per cent of school children present systolic murmurs. These figures are consistent with the incidence of murmurs found in routine examination of children in three schools in a New Jersey suburban area.

From a statistical viewpoint, rheumatic fever and rheumatic heart disease are definitely on the decrease. This fact, together with reawakened interest in the correctible surgical congenital heart defects makes the intelligent evaluation of heart murmurs imperative. The fear of misdiagnosis, but more importantly the seriousness of making a cardiac cripple out of a perfectly normal child, makes for very careful evaluation. Nor can we ignore the so-called healthy child with a heart murmur, as suggested by Stroud,[3] for there are several congenital defects (such as coarctation and pure pulmonic stenosis) which reflect often little but the murmur. Structural changes which occur after the first decade may seriously endanger the life of the patient in that operative mortality may increase two and three fold. On the other hand, it matters a good deal whether a "minor" murmur be due to "nervousness" or to a slight rheumatic valvitis. In the latter, the extraction of a tooth carries with it the grave fear of subacute bacterial endocarditis.

An equivocal systolic murmur calls for a complete examination. As many as 90 per cent of murmurs can be adequately evaluated by means of a stethoscope, fluoroscopy, and if necessary an electrocardiogram. The remaining 10 per cent can be evaluated more fully by means of a cardiac catheterization or angiography.

In the evaluation of a murmur we consider (1) the type, (2) the grading, (3) the mechanism, and (4) the course of functional murmurs. Functional murmurs are always *systolic* in time. The only diastolic murmur that may be considered of functional origin is the one heard early in acute rheumatic valvulitis which is due to dilation of mitral ring. Severe anemia has been known to cause a diastolic murmur.

GRADING OF MURMURS

Grade I: Murmur that is barely elicited after auscultation for several seconds. The murmur extends ¼ to ⅓ through systole. This removes reduplication of first sound as a potential murmur.

Grade II: Clearly elicited on auscultation. This is the "equivocal" murmur.

Grade III: Almost always pathologic.

Grade IV: Same as Grade III but may be heard with stethoscope removed several millimeters from chest wall.

MECHANISM OF MURMURS

The mechanism of murmurs may be explained by the ordinary principles of physics. Given a tube of known calibre, one can in-

* Presented at the Pediatric Section, Annual Meeting of The Medical Society of New Jersey, Atlantic City, May 20, 1952. Dr. Kearney is the Director, Rheumatic Fever Unit, N. J. State Crippled Children Commission, St. Michael's Hospital, Newark, N. J.

crease the fluid velocity to a point beyond which eddies or turbulence are created and adventitious sounds result. The physiologic murmur is due to any mechanism that will increase blood flow, such as fever, anemia, nervousness, tachycardia *per se,* hyperthyroidism, and exercise.

EVALUATION OF FUNCTIONAL MURMUR

Localization of murmur: Pulmonic—usually functional.

Aortic and Tricuspid—usually anatomic.

Intensity: Above Grade II usually not functional.

Course: Associated evidence of heart disease—history, physical, x-ray or fluoroscopy.

Secondary factors affecting the gradation are:

(1) *Position:* Functional murmurs are best heard in recumbent position. This is also true of mitral insufficiency.

(2) *Respiration*: This has an effect on cardiac function. It causes breath sounds which may be confused or interpreted as heart murmur. If a murmur, heard in a pulmonic area or at the base of the heart, disappears with a deep inspiration it is often assumed to be inconsequential. Although this is true, it may mean that the murmur is faint and unable to make itself heard through the cushion of intervening lung. It is necessary to auscultate during a period of apnea.

(3) *Obesity*: A thick chest wall may make a Grade III murmur Grade II.

ANALYSIS OF DATA

A study based on children seen at his clinic and followed over a period of 10 years was reported by Messeloff.[2] Repeated re-evaluations of physical, fluoroscopy and electrocardiograms were consistently normal.

	Per Cent
Site of Maximum Intensity:	
(1) Pulmonic area	22
(2) Left third space	47
(3) Left fourth space	14
(4) Apex	17
Intensity:	
(1) Faint (Grade I)	67
(2) Moderate (Grade II)	33
Effect of Change in Position:	
(1) No change	11
(2) Louder in recumbency	61
Effect of Exercise:	
(1) No change	11
(2) Louder	53
(3) Fainter	17
(4) Absent	7

Organic conditions that must be ruled out in interpretation of functional murmur include:

A—Organic Mitral Insufficiency:

(a) Must eliminate non-cardiac conditions as fever, anemia, et cetera. When a patient who suffered an attack of rheumatic fever displays an apical systolic murmur Grade II or louder intensity, one is warranted in making the diagnosis of organic mitral insufficiency if there is no other explanation of the murmur. The diagnosis may be ventured even if there is no definite past history of the rheumatic state provided that there are other stigmata such as family history of rheumatic fever or rheumatic heart disease or a past history of frequent epistaxis or growing pains. If there is Grade I murmur these patients are carried as possible and potential rheumatic heart disease.

(b) The diagnosis of mitral insufficiency becomes more certain if the murmur is Grade III or louder and there is accentuation of the pulmonary second sound, slight cardiac enlargement and if the left auricle shows prominence with a systolic pulsation on fluoroscopy.

B—Coarctation of Aorta:

This, together with pulmonic stenosis and patent ductus arteriosus are the remedial noncyanotic congenital heart defects. The earlier the diagnosis, the better the operative result. Coarctation of the aorta exists in one in every 35,000 persons. Thus it occurs often enough to be seen by every physician. It is characterized by a systolic pulmonic murmur. Such murmur may also be well elicited between the scapulae. It is imperative to palpate the femoral pulses in every child who exhibits a heart murmur. Diagnosis is confirmed by hypertension in upper extremities and hypotension in lower extremities and by aortography. Notching of the ribs occurs only as a late sign.

C—Ventricular Septal Defect:

Interventricular septal defects are compatible with good health. A Grade II or III systolic murmur is heard along the sternal border. History of murmur in the neonatal period (proved by cardiac catheterization). Bacterial endocarditis is a frequent complication. It accounts for 25 to 40 per cent of fatalities. A

moderately loud unexplained systolic murmur in the region of the lower precordium in the younger individual makes one think of an interventricular septal defect.

D—Auricular Septal Defect:

This is usually compatible with good health for three decades.

(a) Grade I or II systolic pulmonic murmur.
(b) Both the first and second pulmonic sounds are accentuated. Diagnosis is made by correlation. Cyanosis is absent but may appear as a late sign. Right axis deviation is noted on the electrocardiogram. Occasional disturbances in auriculo-ventricular conduction or right bundle branch block may occur. Fluoroscopy of an advanced case may show: (a) Globular heart—right heart enlarged—dilation of pulmonary artery. (b) Prominence of vascular bed, the so called hilar dance. (c) Rarely is it complicated by subacute bacterial endocarditis.
(c) Subaortic stenosis is like aortic stenosis in signs but it occurs in a younger individual. Aortic second sound is accentuated since valve is not involved. Grade II to III murmur with thrills is the rule.

E—Pulmonary Stenosis as an Isolated Lesion:

(a) Cyanosis is absent except terminally.
(b) Loud systolic pulmonic murmur usually with a thrill, is heard with decreased to absent P_2.
(c) Right axis deviation.
(d) Fluoroscopy—enlarged right ventricle and enlarged pulmonary artery.

F—Patent Ductus Arteriosus:

This is the one defect in childhood alone which can (in most cases) be diagnosed by auscultation alone. A murmur is usually elicited in the neonatal period at the second left interspace. Early, it may be purely systolic, and later become both systolic and diastolic. This is the so-called "machinery hum" murmur. It is not uncommon for these children to suffer from frequent upper respiratory infections. Some may evidence retardation in growth. Prior to chemotherapy and antibiotics, the major hazard was subacute bacterial endocarditis. Optimal operative period is usually after the fourth year of life.

EVALUATION OF A FUNCTIONAL MURMUR

History:

(a) No rheumatic heart disease in family.
(b) Absence of rheumatic fever history in the patient or evidence of secondary rheumatic manifestations as epistaxis, growing pains, pallor, anemia, fatigue.
(c) Absence of congenital heart disease.
(d) Consistent good health.
(e) Location of murmur.
(f) Fever, anemia, "nervousness", or tachycardia.
(g) A murmur of varying intensity.
(h) No alterations of heart size on fluoroscopy.

St. Michael's Hospital

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DENTIFRICE ABRASIVES

According to recent dental research,* dentifrices containing sodium monophosphate as an abrasive are superior to those containing chalk, tri-calcium phosphate, or dicalcium phosphate. The sodium monophosphate type of dentifrice was found to produce a smooth, lustrous tooth surface with no appreciable abrasive effect on enamel and with a minimal amount of erosion of exposed cervical dentin. It was also shown that surfaces of teeth with a high luster accumulated fewer bacteria than surfaces with a low degree of luster.

*Van Huysen, G., and Boyd, T.M.: Cleaning Effectiveness of Dentifrices. Journal of Dental Research. (August 1952).

ATAXIC CEREBRAL PALSY WITH AKINETIC SEIZURES†

DRAMATIC RESPONSE TO DRAMAMINE*

Sidney Keats, M.D., Newark, N. J.

A rare neurologic disorder in a child responded dramatically to antihistamine therapy.

The diagnosis of congenital cerebellar ataxia has become more frequent in recent years in surveys of cerebral palsied children.[1] In most uncomplicated cases, nothing abnormal is noted until the child begins to reach for objects.[2] At this time, a volitional tremor of the fingers or a gross abnormality of eye—hand coordination may be noted. These children are late in holding up the head, in sitting, in standing, and in walking. Loss of postural tone may be present. Later, when the child does walk, he falls frequently, and may sway from side to side, utilizing an unusually wide base. Testing of individual muscles may show no abnormalities. Speech is often faulty; articulation may be distinct, but often the rhythm may be sluggish or of the scanning, staccato type. Tendon reflexes are generally normal. Mental development may proceed according to standards but retardation is not unusual. Mild cases have been known to recover completely without treatment over a period of years.[3] I have found this to be the exception. In most cases, improvement may be achieved by careful physical and psychologic evaluation of the child, followed by intensive exercises for balance and walking training, occupational therapy for feeding and other self-help activities, speech therapy, and a carefully planned nursery or preschool program. Seizures, usually of the petit mal variety, may complicate the clinical picture very seriously. These seizures are difficult to control; and may interfere with the physical and mental maturation of the child despite the intensive rehabilitation program. This often leads to marked deterioration of the child.

I have had the opportunity of rehabilitating a severely handicapped child, with congenital cerebellar ataxia, whose development was completely stifled by numerous daily akinetic seizures.[4] This child had been studied thoroughly at several of the larger neurologic centers. Despite such anti-convulsant therapy, as diphenyl hydantoin, trimethadione, glutamic acid and phenobarbital alone and in many combinations, the seizures continued unabated, resulting in a complete lack of physical and mental development. Finally, Dramamine* was prescribed because of the severe ataxia which did not respond to the routine rehabilitative measures. During fifteen months of Dramamine* therapy, no seizures were noted. During these months, the child responded completely to the rehabilitation program, and finally departed for England to live a useful life, now able to walk, talk, dress and feed herself and ready for formal primary education.

Dramamine* is beta-dimethyl-aminoethyl benzohydryl ether 8-chlorotheoplyllinate. It has been well established in the control of motion sickness.[5] It has been used effectively in the prevention and treatment of seasickness, airsickness, the nausea of pregnancy, Meniere's syndrome, nausea of general anesthesia, radiation sickness, migraine, and postfenestration reactions. It possesses antihistaminic and anticholinergic properties. The site of action is imperfectly understood, but there is indication of an action of depressing labyrinthine function or its neural pathways, a highly selective central action, or both. Few side reactions of this drug have been noted. The most common reaction experienced has been drowsiness, but even this has been slight or infrequent.

CASE REPORT

A white female child of four, was brought to the clinic on February 1, 1950. Family history showed no convulsive disorders or "neuropathic" abnormalities among siblings, parents or grandparents. She was born by normal labor at full term of an uneventful pregnancy. A normal neonatal development was marred by a short general-

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*Dramamine is the G. D. Searle Company's trade-name for a complex chlor-theophyllinate compound.

ized convulsion, without preceding illness, at the age of three months. Similar seizures recurred at monthly intervals until the age of twenty months, when it was noted that the seizures occurred several times daily, usually in the morning hours. These seizures followed a pattern in which the head would suddenly fall forward as if entirely out of voluntary control. After a momentary dazed expression, voluntary motor control returned. She was slow to sit up and slow to talk. She could not sit up unassisted, stand up unassisted and could not walk. Phenobarbital, trimethadione, diphenyl hydantoin and other anti-convulsant medication, had been used in several neurologic clinics, alone and in combination, without impeding the number or severity of the seizures.

She was a well-nourished child of normal stature and symmetrical physical development. There was no wasting or weakness of the musculature. All movements of the extremities showed gross incoordination of the "cerebellar" type. Postural tone was diminished. Sitting and standing balance required complete assistance. Tremors of the head and extremities were noted. Finger movements showed a gross ataxia. The station was unsteady with eyes opened and closed. Speech was slow and explosive at times. The tendon reflexes were normal on the two sides. The plantar reflexes were flexor. There was no ankle clonus.

A diagnosis of congenital cerebellar ataxia with akinetic seizures was made. Psychologic investigation was completed and plans for rehabilitation were made. Short calipered ankle braces and a firm stand-up table were prescribed. The child was required to stand at first with assistance in the table for a few minutes and thereafter the period of standing was increased gradually until the child was able to stand alone in the table for several hours during the day. Exercises under the guidance of the physical therapist were instituted. These consisted of sitting and standing balance training, trunk strengthening exercises, basic leg and arm reciprocation exercises, stabilizer, ski-walking, parallel-bar, and walking exercises. Occupational therapy for eye-hand coordination, gross skilled activities, such as feeding, button-board and self-help activities, and reach-grasp training was started. Routine speech therapy and nursery program were included.

Various drugs, alone and in combination, were prescribed for the control of the many seizures. These included various hydantoins and also phenobarbital and glutamic acid. Seizures at times would come with dramatic suddenness throwing the child to the floor momentarily, always with almost immediate resumption of activities. These akinetic seizures, without doubt, were serious blocks to the rehabilitation program. On April 24, 1951, because of the great similarity in the pattern of gross incoordination to that of "motion sickness", it was decided to place the child on a trial of Dramamine,* 75 milligrams daily in divided dosage, in addition to the current dosage of anti-convulsant medication. An immediate and dramatic improvement was noted both in the control of voluntary motion and in postural tone. This improvement continued in sitting up unassisted, standing alone without assistance, and with continued training, finally walking without assistance. In occupational therapy the child began to master self feeding and the buttoning of clothes. Similar progress was noted in the mental alertness of the child in the nursery class. Six months after the start of this therapy, it was noted that the number of seizures had lessened considerably. The dosage of Dramamine* was then increased gradually to 150 milligrams daily as a maintenance dose, and all anti-convulsive medication withdrawn. The effectiveness of the Dramamine* was tested by eliminating this drug for several days at a time, whereupon the seizures returned several times daily, and the child was observed to regress physically and mentally. No toxic side-effects were noted during the course of the Dramamine* therapy. On June 17, 1952, at the age of seven, the child was graduated from the nursery class, the opinion of the psychologist being that she was now ready for formal primary education. Except during the period of experimental withdrawal, there had been no seizures since the start of the Dramamine* therapy, that is, in fifteen months, and about nine months after all anti-convulsant medication had been eliminated. She was now able to walk unassisted on level ground and could manipulate stairs with some assistance. She was able to feed herself, dress herself, and button her clothes. Her speech was in short sentences, the articulation being quite clear.

SUMMARY

A single case report is offered of a cerebellar ataxic child with akinetic seizures who exhibited no response to routine rehabilitative training and anti-convulsant therapy. A dramatic improvement was noted with the use of oral Dramamine.* All seizures were eliminated for fifteen months, and a rapid advance was made in all modalities of rehabilitative therapy to the point where a formerly helpless and retarded child could now be considered an average seven year old with a mild physical handicap. The effectiveness of the Dramamine* was tested by stopping the drug, whereupon the seizures returned several times daily, and the child regressed to her former vegetative level. The mechanism of the action of Dramamine* (an anti-histaminic drug, used commonly in the prevention and treatment of "motion sickness") is not known and no theories are offered. However, all other factors being equal, I am convinced that the Dramamine* eliminated the many seizures which complicated the physical and mental progress of this child, enabling her to achieve postural balance, and to develop physically as well as mentally. This case

report is presented with the hope that it will stimulate further investigation in the effectiveness of Dramamine,* and other antihistaminic drugs, in the treatment of ataxic cerebral palsied children and in the control of akinetic and other types of petit mal seizures.

31 Lincoln Park

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IT'S NICE MONEY IF YOU CAN GET IT

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Casualty insurance rates are, in large measure, dependent on the size and number of claims paid out. The author decries the many examples of far-fetched cause and effect relations between trivial injuries and nontraumatic lesions and pleads for a more scientific, less emotional, approach to this problem by physicians called on to testify in such cases.

Industrialization has created an artificial environment so full of traumatic and chemical insults to human tissues that economic and legal safeguards such as Workmen's Compensation and liability insurance have become necessary. Compensation laws define the liability and the award for an occupational disease or trauma; courts attempt to do the same in cases of civil suit except for a certain loose liberality.

The injured party tends to exaggerate the alleged illness in order to collect as much as he can; industry and the insurance carrier seek to minimize or deny the liability in order to pay as little as possible. In each instance, there is a wish for someone else to shoulder the cost and the catastrophe. The physican who is called on to evaluate the extent of the disability and the causal relationship wishes to be fair to the insurance carrier and yet not deny the worker a just claim. If sympathy or lack of knowledge doesn't cloud his judgment, an award may then be made on fact and justice, but if an adverse decision were likely to result in economic hardship to the injured man and his family, the physican might subconsciously qualify his testimony with enough doubt to sway the referee, the jury and perhaps even the judge in favor of a verdict for the plaintiff.[1]

Perhaps one's sense of justice wouldn't be so outraged if the claims and awards were within reasonable limits, if the suits in excess of $100,000 weren't so commonplace and out of proportion to the injury, if the allegations weren't so embroidered or if the emotional appeal weren't so slobbered. The jury often has a Robin Hood complex and is moved by a perverted sense of social behavior to whack the rich, impersonal and vulnerable insurance carrier. The award is often predicated on ability to pay, but the very nature of insurance accounting assures that this cost will be passed on to the policy holders, industry and the consumer. In New Jersey alone, compensation awards have risen 1000% in a year and automobile insurance rates have risen twice in the past year. Professional liability insurance for doctors in New Jersey will cost nearly 50% more in 1953 than in 1952.

The gulf between the knowledge of even the most intelligent layman and the doctor is unbridgeable. The physician in court is at a technical disadvantage in making himself understood. His testimony, when not disputed by equal medical authority, may have to be taken on faith, not communicable scientific fact. Clinicians are the least reliable medical wit-

nesses; pathologists and radiologists are the best for they can offer corpus delicti evidence as to the presence, course, presumptive cause and duration of a disease process. A difference of opinion on the objective evidence of a radiogram is rare; often the film and report are admitted without protest. On the other hand, to illustrate clinical and semantic misinformation, Stewart tells the story of the patient who had been in Memorial Hospital on and off for years. The first admission note stated that his lesion followed a duck bite. Several generations of residents and attendings accepted this etiology without question until one resident, who knew something about ducks, asked the patient what kind of a duck it was that bit him. He replied; "It vos a bool duk."

Trauma has been accused of inciting or aggravating every known illness and many unknown, imaginary ones. The most vexing medico-legal problem is the relation of injury to cancer. The ominous prognosis always carries the chance of a high award to the claimant and a serious financial threat to industry. Unfortunately, too many doctors feel that an injury can incite or aggravate cancer, and too many lawyers are eager to bring suit on that belief. With the possible exception of giant cell tumors, melanocarcinomas and chondromas there is absolutely no basis for believing that a single injury, often a trivial one, can start a malignant process. As for aggravation, there is no experimental evidence to prove that metastasis can be induced by injury or that a malignant lesion can be similarly accelerated. Lubarsch[2] and later Tinozzi[3] failed to incite local metastases by fracturing the bones of cancer-bearing mice and rats. In experiments such as these, the primary growths were occasionally observed to *decrease* in size and rate of growth.

Toth[4] observed a patient with a traumatic compression fracture of a lumbar vertebra after a bona fide injury. Subsequently, compressions appeared in other vertebrae; these seemed to be pathologically induced, and at autopsy metastatic neoplasm was found in the latter vertebrae but not in the original, traumatically compressed vertebra. A second patient suffered a severely compounded fracture of the forearm. The lacerated soft tissues healed normally and the fractured bone showed normal callous formation, but a soft-tissue mass formed at the site of the injury. This did not appear inflammatory and a biopsy showed adenocarcinoma. The arm was amputated later, but no tumor was found in the fractured bone, the lacerated soft tissues, or at the sites of repeated subcutaneous and intravenous injections. A chest film made after the amputation showed multiple nodular metastases. A search disclosed widely distributed osseous and soft-tissue metastases. Under anesthesia, blunt hammer blows sufficient to produce hematomas over the knee failed to result in metastases in a *locus minoris resistentiae*. At autopsy later, a primary tumor of the lung was found, but in the deliberately and incidentally traumatized areas there was no tumor.

Trauma produces hyperemia. Severe infections also produce hyperemia. Some tumors, particularly sarcomas, occasionally regress in the presence of severe infections. Why then should the hyperemia of trauma favor acceleration?

In over 26,000 compensation claims for injury in New York State, 37 malignant lesions were found. This is identical with the rate present in the general population, namely, 1 in 700 at the age of 50. In 500,000 cases of workmen's compensation there were four claims for tumor not secondary to other obvious injuries. Cancer is a common disease—the second greatest cause of death — therefore many people will die of it regardless of what occupation they choose to follow. Thus, in such a large number of industrial injuries, the chance of a cancer coincident with trauma is very likely.

Physical violence has been the commonest irritant of all animal life since it acquired mobility, and, as can be seen by the automobile, the airplane and high-velocity missiles, the greater the mobility, the greater the trauma. Yet, osteogenic sarcoma is as rare today as in the sluggish eons long ago. In the course of anyone's life, innumerable injuries are sustained. Hundreds of thousands of fractures occur each year. The number of industrial, farm, home and traffic injuries must be in the millions. The casualties of World Wars I and

II from violence of the most maiming character, including atomic blasts, must certainly have added many many millions more. To date, no increased number of tumors has been reported among veterans of either war.

Our surgical colleagues do some of the most traumatic jobs that tissues must endure; so severe that without anesthesia they could not be done and would shock the patient to death. They bang out bone chips with chisels, rongeur holes in hips and skulls, drive nails, wires and screws; insert plates, bone grafts, medullary pins; do osteotomies, arthrodeses, arthroplasties, tractions and amputations without number, yet not one osteogenic sarcoma has come off the orthopedist's rack, screw and pinion. But we *are* asked to believe that a trivial blow which doesn't even mar the skin, much less fracture the bone, can be sufficiently noxious to provoke some cells to violent growth. Moreover, Jaffe states that osteogenic sarcoma starts in the interior of the shaft — the medulla, not the periosteum where the brunt of the injury would be taken. Stewart facetiously propounds the Stewart-Foote Law: "To establish the traumatic origin of tumors requires that one be able to prove that trifling injuries are vastly more cancerogenic than are major injuries."

The radiologist sees many pathologic fractures through metastatic foci, and follows them for years without evidence of local seeding in the contiguous soft tissues. Haven't cancer cells spilled into the fracture site by trauma? According to the traumatic theory, transplanted experimental tumor tissue should grow like weeds; the primary growth has been lifted into a well-ploughed and fertile field. Actually, some transplanted tumors wilt; the wonder is that so many take root.

In 1907, at the French Congress of Surgeons, Segond outlined the criteria for a causal relationship between trauma and subsequent cancer. These postulates were adopted by the Second International Congress of Cancer in 1910:

1. Occurrence of the trauma must be proved.

2. The trauma must be severe enough to be destructive.

3. The subsequent growth must appear at the site of the injury.

4. There must be reasonable certainty that the traumatized part was normal before the accident.

5. The time between the trauma and the appearance of the tumor must agree with scientific experience; that is not less than three weeks and not over three years.

6. The diagnosis should be confirmed by clinical, roentgenographic, and if possible, by microscopic examination.

Occasional reports in the medical and legal literature appear to fulfill these criteria, but as Stewart has pointed out[5], a review of the evidence discloses either ignorance on the part of the testifying doctor, and chicanery or self-delusion on the part of the patient. In view of the frequency of trauma, coincidental appearance of a tumor is not unlikely, and the injury serves to call attention to a pre-existing tumor, an event which Ewing called "traumatic determination."

The history of every occupational disease has been initial failure to recognize the cause and resistance by the industry to accept the blame, with injustice to the worker. Once an occupational incidence is recognized it is followed by a compensation spree and by etiologic hallucinations wherein every symptom is blamed on exposure to the offending industrial agent. The history of silicosis, asbestosis and beryllosis is a distressing struggle of motivation. One need only recall the radium watch-dial litigation in New Jersey where the company brought in a medical expert to testify that the small amount of radium could not possibly have caused sarcoma and death. The company fought the case for several years until Martland proved that the small amount of radium did precisely that.

The arguments so far presented apply not only to trauma and carcinogenesis but to every other illness. The problem of low-back pain among laborers in industry, candidates for military duty and claimants in accident cases is particularly insoluble and one that will never be properly adjudicated since it is rarely possible to disprove the presence of pain even in the absence of pathology demonstrable either clinically or roentgenographically. It is an interesting fact that the Surgeon General of the

Continental Army during the Revolutionary War complained about the large number of able-bodied men who disqualified themselves for military service because of an aching back.

The "railway spine" became a synonym early in the history of railroad accidents for a disabling low-back pain magically cured by a cash award. How to assess the responsibility of industry and the claims of the patient may be a vexatious problem for compensation referees or civil courts, more so for the latter since their awards often seem arbitrary and capricious. The radiologist who strives for an understanding between the x-ray changes and the pathogenesis of a disease soon has the habit of doubt thrust upon him by the preposterous claims of patients, lawyers and insurance carriers alike.

When a 56-year-old male is struck in the chest and abdomen with a bale of asbestos, he falls and strikes his head. Thereafter he has headaches. X-rays of the skull show numerous metastatic foci. A gastro-intestinal series reveals advanced carcinoma of the stomach. Thus, blow on the abdomen = cancer of the stomach; fall on the head = metastasis to the skull. To avoid a nuisance suit and because the patient was near retirement, the company reportedly paid the heirs $4000. Payments such as this encourage irrelevant claims and raise the price of shingles.

When a 16-year-old girl slipped on the wet floor of a candy store in 1948, she hurt her knee. X-rays taken three weeks later show an osteogenic sarcoma at the lower end of the femur. The postulates of Segond seem to be fulfilled here. Actually, the injury was a lucky coincidence and the lesion was early enough for amputation with survival to date. The insurance company paid the medical and surgical bills, relieved to get off so cheaply.

A 35-year-old male had a melanoma of the neck biopsied in 1944, and widely excised in 1945. He knew what he had. In 1946, he "slipped" from a bus and was taken unconscious to the hospital. He couldn't make his claim on the bus company stick, so three weeks later he re-entered the hospital with a swollen hand which he said resulted from a fall from a ladder while at work. X-rays showed a destructive tumor of the index finger. Amputation was done and the report was melanocarcinoma identical with the excised specimen of a year before. To his death from widespread melanosis, he insisted that the fall from the ladder was responsible for his condition.

When a middle-aged female slipped at her place of employment, she struck her head. A month later she had a dizzy spell at home and fell against a bureau drawer, hurting her breast. She consulted a physician who found a mass. This proved to be carcinoma. A lawyer brought suit to trial against the company on the basis of fall at work = dizzy spell a month later = fall on the breast = cancer, and also because a physician was ready to testify that injury to the breast could have aggravated the tumor into increased activity.

The examples are endless. A question addressed to Queries and Minor Notes in the J.A.M.A. for October 18, 1952 is reproduced to summarize the points made in this paper.

Question:—Does physical shock, impaired nutrition, or lowered physical resistance, such as follows a major surgical procedure, contribute to the more rapid growth of malignant lesions? A 48-year-old man had a partial gastric resection for adenocarcinoma, grade 2, in 1941. He was well until 1946, when he fell and injured his back. A diagnosis of herniated nucleus pulposus was made, and the disc was removed. In 1949, he again had symptoms referable to his stomach, and an exploratory laparotomy revealed a large malignant tumor of the stomach with extensions into adjacent organs. He died in July, 1950, after having repeated hemorrhages. Could the back injury (there was no injury to the abdomen) and the subsequent operation have had any effect on the recurrence of the cancer?

M. D., Ohio.

The following answer was given:

No evidence exists to show that a major surgical procedure contributes either to the more rapid growth of cancer or to the retardation of its growth. Actually, this patient lived much longer than does the average patient with gastric cancer. After partial gastric resection, recurrences of cancer in either the stomach or the duodenum are common events. Some represent residues of cancer not removed by partial gastrectomy. Others, as the time factor in the present case would indicate, represent new tumors in a "condemned" gastric mucosa. Abundant evidence exists to show that gastric cancer is a multicentric lesion. The reason this is not commonly recognized to be the case is that patients, as a rule, succumb too soon to the effects of the initial cancer

for subsequent local manifestations to appear. Evidence for such multicentricity has appeared as late as 23 years after initial gastric resection. Local recurrence, that is, residual disease as opposed to development of new gastric cancer, after partial gastrectomy usually appears promptly but may be delayed in rare instances for a period of years.

Note the sequence of events: gastric cancer resected in 1941, injury to back in 1946, recurrence in 1949, death in 1950, and the specific question as to the effect of injury to the back on the recurrence of the cancer. The question is not specifically answered although one may imply from the answer that the trauma did not have any effect, just as one may imply from the question that the patient did think it had, and that the physican asking the question was in doubt as to the relationship of the two. It is this doubt and indecision as to the facts that encourages patients and lawyers to couple an injury with a lesion no matter how remotely separated the injury and the lesion are in time and truth.

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INDUCTION OF LABOR IN TOXEMIA

The failure of toxemia of pregnancy to respond to therapy requires that labor be induced between the twenty-eighth and thirty-fourth weeks. Since the majority of these patients show no evidence of impending labor, and have what has been called the "long, closed cervix," they are usually subjected to cesarean section. Mauzy and Donnelly [1] have recently described their experience with vaginal delivery in such cases, labor being induced by judicious use of Pitocin.®

All patients were under constant supervision, the blood pressure, pulse and fetal heart rate being recorded every ten or fifteen minutes, and the frequency, duration, and intensity of uterine contractions being noted as they occurred. Fractional intramuscular administration of Pitocin,® and later intravenous administration of the same preparation were used to induce labor. The latter method consists of adding five minims of Pitocin ® to 500 cc. of a five per cent glucose solution, gradually increasing the rate of flow from nine drops per minute up to a maximum of 60 per minute, until regular contractions of thirty seconds' duration occur. This procedure is carried out for six to eight hours during the day, and repeated on successive days until labor starts, or the membranes can be ruptured. The blood pressure is recorded every 15 minutes during Pitocin ® administration. No marked elevation occurred in the series described.

This method of inducing labor is recommended only when the patient can be kept under constant supervision and observation.

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STERILITY CONGRESS

The International Fertility Association announces the First World Congress on Fertility and Sterility to be held at the Henry Hudson Hotel, New York City, from May 25 to 31. There will be a number of sessions dealing with sterility, including some devoted to socio-economic and psychosomatic aspects. A novel feature will be the use of ear phones and simultaneous translations as the various meetings will be conducted in English, Spanish and French.

HODGKIN'S DISEASE IN A NEGRO BOY*

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Hodgkin's Disease in a Negro child, a rare clinical entity, is reported with a discussion of the difficulties entailed in establishing the diagnosis.

Only four cases of Hodgkin's Disease have ever been reported in Negro children.[1] The exquisite rarity of this, therefore, justified the following case report. As a matter of fact, Hodgkin's Disease is unusual in children of any color. Up to 1946, only 244 cases of lymphogranulomatosis have been reported in children in all the world's literature.[1] The disease, it may be mentioned, is more common in males than in females.[4]

A nine year old Negro boy was admitted to the Morristown Memorial Hospital on March 14, 1952. His complaint was "swollen glands in the neck." Family history was not relevant.

Five years earlier (when he was four years old) he had been admitted to the same hospital with the same complaint. Under penicillin administration, the swellings became smaller and he was discharged five days after admission. At that time his hemoglobin was only 65 per cent, his red cell count 4,170,000 and his leucocyte count was 12,700. Polymorphonuclear cells accounted for 60 per cent of the leucocytes.

Second admission was four years later (at age 8). He then complained of fever, swollen cervical nodes and abdominal pain. His temperature then ranged from 98 to 101.4. Cervical and epitrochlear lymph nodes were swollen on both sides, and the axillary and inguinal nodes on one side. Chest x-ray was normal. Hemoglobin then was 11 Grams per cent; red count was 4,300,000 and white count was 19,500. The polymorphonuclear ratio fluctuated between 70 and 81 per cent. The sedimentation rate was 20 millimeters in one hour. Heterophile agglutination test was negative. Biopsy of the cervical node showed "chronic reactive lymphadenitis." Under penicillin he improved enough to justify discharge on the seventh day.

He returned to the hospital six months later, complaining of headache and aching in his abdomen. His mother felt that he was very "hot". The child refused food. There was no history of cough, respiratory symptoms, nausea, vomiting or diarrhea. The mother stated that the patient had had enlarged cervical glands continuously for the past year. He had been attending the pediatric clinic and it was noted the glands sometimes became smaller and then became enlarged again.

Physical examination on this admission revealed a well developed, well nourished boy in no apparent distress. The only significant abnormal finding was enlargement of the posterior cervical nodes bilaterally, especially on the left.

Serial urinalyses were normal. Serial blood counts revealed the following ranges: Hemoglobin, 10 to 12 Grams; red cells 4.2 to 5.1 million; white cells 22,200 with gradual decreases to 12,400. The polymorphonuclear ratio averaged 71 per cent. Blood culture was negative. Sedimentation rate was 70 millimeters in one hour. Serum albumin was 3.5, serum globulin 3.55 Grams %; blood calcium 9.5, phosphorus 4.9 mg.%. Sternal marrow aspiration revealed granulocytic hyperplasia. Heterophile agglutinations were negative. Agglutinations for Brucellosis were negative, chest x-ray negative. E.C.G. "wandering pace-maker".

The patient received penicillin therapy on admission because it was felt that he was suffering from an acute infection possibly a lymphadenitis secondary to pharyngeal infection. His temperature dropped precipitously from 103 to 98 in 24 hours, and then remained normal. The child seemed more comfortable. On the eleventh hospital day, he developed some enlarged, left axillary nodes despite the fact that his temperature remained normal. On the thirteenth hospital day, a biopsy was done and three oval-shaped masses were removed. Microscopic examination of these nodes revealed Hodgkin's Disease. Independent opinions were rendered by Dr. George J. Young and Dr. Hugh F. Luddecke on the axillary nodes.

The wound healed nicely by primary intention, although there was a slight temperature elevation after the biopsy. The patient was discharged on the sixteenth day. He was quite comfortable and arrangements were made for radiation therapy.

The patient was admitted to the hospital a week later for radiation therapy. He received therapy to tolerance in both cervical and axillary regions. He was re-examined two months later, at which time there were no palpable nodes and he was feeling well.

This patient was re-examined December 27, 1952. He was perfectly free of symptoms but there was one lymph node palpable in the left axilla. Further radiation therapy has been arranged.

The diagnosis of lymphogranulomatosis is still often fraught with difficulty because of the scarcity of symptoms on one hand and the difficulty in obtaining a satisfactory biopsy on the other.

The most common presenting sign in Hodgkin's Disease in children is enlargement

* From the Medical Service of the Morristown Memorial Hospital.

of cervical nodes. This is the initial sign in 79 per cent of the cases.[3]

In the case presented, enlarged cervical lymph nodes were present for over five years before diagnosis; and the diagnosis was considered for many months before it was proved. The importance of this delay during the latent period becomes apparent when it is realized that the average duration of life in a child is thirty months after the diagnosis is made.[5, 6, 11]

The classification of Hodgkin's Disease into paragranuloma, granuloma, and reticulum cell sarcoma by Jackson and Parker[10] raises the question of the prognosis in the more benign lesions, i.e., paragranuloma.

To return to our case, the diagnosis was not made early, even though a biopsy was done six months before the diagnostic one. It may be that Hodgkin's Disease involving cervical lymph nodes predisposes to chronic recurrent pharyngitis and related local inflammatory lymphadenitis. The altered microscopic appearance of a node removed from this region, and the apparent response to antibiotic therapy would both tend to delay correct diagnosis.

Our patient did have a Pel-Ebstein type of pyrexia and possibly an upper respiratory infection accompanying it. There was marked leucocytosis with each febrile episode, but the differential white blood count was not unusual.

Enlarged lymph nodes are common in children, especially enlarged cervical lymph nodes. Persistent enlargement, however, would seem to indicate a need for definite diagnosis. Infectious adenopathy and other tumors, especially lymphomas, must be included in the differential diagnosis.[2, 7, 8]

CONCLUSIONS

1. Hodgkin's Disease in children is rare; it is especially rare in Negro children.

2. Persistent lymphadenopathy is an indication for biopsy.

3. It is preferable to remove a node for biopsy from a region *other* than the neck to obviate the confusion from concomitant infection.

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SPINAL FLUID SUGAR IN MENINGEAL TUMORS

It is well known that the spinal fluid sugar level may be depressed below normal levels (35-85 milligrams per 100 c.c., Folin-Wu method) in meningitis due to pyogenic, tuberculous, fungous and yeast organisms. Likewise, an elevation of the protein content of spinal fluid is anticipated in tumors of the central nervous system. A recent report from the Mayo Clinic[1] indicates that low or absent spinal fluid sugar may also be found in the presence of carcinomatous, sarcomatous, or gliomatous involvement of the meninges. Four such cases with this unusual chemical finding are reported. The mechanism for this depression of the spinal fluid sugar is not known, although various theories have been proposed.

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CARDIOVASCULAR SURGERY AT ST. MICHAEL'S HOSPITAL*

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St. Michael's Hospital has pioneered cardiac surgery in New Jersey. Details of procedures and results achieved thus far are outlined, with a discussion of future problems in this rapidly expanding field.

The cardiac clinic at St. Michael's Hospital was first organized in 1936, at a time when cardiovascular surgery was unable to offer any surgical aid to patients with congenital or acquired heart disease. Patients with patent ductus arteriosus, cyanotic heart disease, mitral, stenosis and other heart diseases could only be diagnosed, cataloged and given a list of regulations limiting their activities to avoid straining an already defective heart. Other medications were pointed primarily in the same direction. The outlook for most of these patients was dismal.

In 1939, Gross[1] reported the first successful ligation of a patent ductus arteriosus. This started a chain reaction that carried through to Crafoord's[2] successful operation for coarctation of the aorta in 1944; Blalock's shunt operation[3] for blue babies with pulmonary stenosis or atresia in 1945; Bailey's first successful commisurotomy for mitral stenosis in 1948;[4] Brock's and Sellor's direct attack[5] on the stenotic pulmonary valve in 1949 and Beck's clinical report on revascularization of the heart[6] in 1951. These surgical triumphs brought hope to the patients with congenital and acquired heart disease and encouragement to the cardiologist with vision.

The success of these surgical procedures brought to light a large number of patients looking for relief. The few pioneers in the field of cardiovascular surgery were swamped with cases and long waiting lists developed. Patients awaiting surgery, in some instances, lost their opportunity entirely because of uncontrollable delays. Many of the patients were indigent and the problem of sending them to distant cardiac surgical centers was very difficult.

St. Michael's Hospital in Newark, N. J., realizing the hopelessness of the situation for many patients, decided to establish a cardiovascular center of its own. It was decided to join the cardiovascular with the thoracic surgery service because this team was best trained to handle the problems of cardiovascular surgery. Since there were many new gremlins in the field of cardiovascular surgery which even the thoracic teams would have to clear out, we decided to invite to St. Michael's Hospital cardiovascular surgeons already established in the field. We also arranged to have the cardiovascular team develop their technics in the animal laboratories. Here we were able to master all the operative procedures accepted to date and also to develop technics for the correction of certain cardiovascular defects still unsolved.

Fortunately, Dr. Charles P. Bailey and Dr. Claude S. Beck, two pioneers in cardiovascular surgery, accepted our invitation to work toward the development of St. Michael's cardiovascular unit. Since January 1950, we have been performing cardiovascular surgery on selected patients referred for evaluation and treatment. The operations to date include:

	Cases	Deaths	Mortality
Patent ductus arteriosus	24	0	0
Brock operation: pulmonic stenosis and tetralogy of Fallot	25	5	20%
Revascularization of the heart†	13	2	15%
Mitral commisurotomy	41	4	9.7%
Coarctation of the aorta	1	0	0
	104	11	10.5%

†The 13 revascularization operations included 6 of aortic-coronary sinus shunt, one Vineberg operation and 6 asbestos poudrage procedures.

*Read by invitation, Section on Surgery, Annual Meeting of The Medical Society of New Jersey, Atlantic City, May 21, 1952. The authors are respectively, Attending Thoracic and Cardiac Surgeon, Associate Cardiac Surgeon and Director of Cardiology at the St. Michael's Hospital in Newark, N. J.

With the exception of the revascularization procedures most of the other operations were performed by St. Michael's own team. Overall mortality in the entire series was 10.5 per cent.

This group of cardiovascular operations represents only a fraction of the number of cases screened and diagnosed by the diagnostic team of St. Michael's Hospital. This team represents a group from the departments of cardiology under Dr. Antonius, pediatrics under Dr. Murray, physiology under Drs. Green and Welkind, radiology under Dr. Carrigan, laboratories under Dr. Rose and the cardiovascular surgery team of Drs. A. Crecca, J. McGuire, J. Crecca and L. Gilbert. Over five hundred cases were screened and diagnosed by the cooperative efforts of these departments and the sisters of St. Michael's Hospital.

In the performance of this surgery, we have had many very interesting and gratifying experiences. One of our patients, a man 37 years old, was admitted to the hospital as a Negro, because of the effect of the cyanosis on his skin. Shortly after operation, the nurses had to change the chart records because his skin assumed a Caucasian coloring. This same patient was one of our cardiac arrest cases. At surgery the left chest was opened in the third interspace and the heart exposed in preparation for a Brock operation for tetralogy of Fallot. About this time, the heart began to slow down and the situation was critical. Stay sutures were rapidly placed in the right ventricular musculature and an incision was made in the epicardium. The heart came to a complete stop. We realized that the only hope of the patient's survival rested in removing the obstructing septum in the right ventricular outflow tract and then trying to restore the heart beat. A heart rongeur was inserted into the right ventricle and the obstruction was removed. A No. 38 sound was passed through the cardiac incision and through the pulmonary valve to assure an adequate opening. The cardiac incision was closed. There was very little bleeding and what leaked out had the consistency of liquid mud. This removal of the septal obstruction required only two minutes. From this point, cardiac massage was instituted and the heart went into ventricular fibrillation. This irregularity was corrected by electrical stimulation, using two copper electrodes on each side of the heart and a shock of full house current. With this stimulation, the patient was jarred six inches into the air. The heart stopped completely and then resumed with normal rhythm. The time elapse between cardiac arrest and normal rhythm was eleven minutes. Circulation was maintained most of the time by manual massage. Postoperatively, the patient had a period of partial aphasia for a few months. He is now in good condition mentally and physically.

Other experiences include nine cases of cardiac arrest during cardiac surgery. We successfully restored eight of these to normal rhythm by manual massage and small doses of intravenous or intracardiac epinephrine.

We will describe briefly the more important and standardized operative procedures used at St. Michael's Hospital.

PATENT DUCTUS ARTERIOSUS

In treating patent ductus arteriosus we use a left lateral incision, entering the pleural cavity in the fourth interspace and exposing the aorta at its arch. The pleura over the aorta is dissected free and the aorta is mobilized above and below the ductus, which can readily be located by the thrill caused by the flow of blood through it. The aorta is mobilized so that any unexpected hemorrhage from the aortic side may be controlled by clamping the aorta above and below the ductus. This technic proved to be a life saving measure for one of our patients. The ductus is then dissected free, the lapet of pericardium dissected away and ductus clamps are applied. The aortic clamp is applied so as to crowd the aortic wall, obliterate the ductus infundibulum and prevent subsequent aneurismal dilatation. The ductus is divided between the clamps and the free ends are sutured with 5.0 arterial silk. Division, rather than ligation, removes the danger of incomplete ligation or recanalization. On one occasion, we lost the pulmonary end of the ductus because a defective clamp slipped off. We controlled this by digital pressure and subsequent suturing of the surrounding tissue to the ves-

sel. This complication may also be handled by opening the pericardium, exposing the pulmonary artery and clamping or ligating the ductus at this point.

COARCTATION OF AORTA

The operative correction of coarctation of the aorta is performed by the same approach as for a patent ductus arteriosus. The aorta is mobilized above and below the coarctation, preserving as many of the vessels as possible. The ligamentum arteriosus is divided and coarctation clamps are placed above and below the narrowed section of the aorta. This section is then excised and the two ends of the aorta are sutured together with 5.0 arterial silk. The spinal cord and other organs are not affected by this period of aortic interruption because of the extensive collateral circulation present.

PULMONIC AND PULMONARY STENOSIS

The Brock procedure or the direct attack on the pulmonary stenosis of cyanotics and on cases of pure pulmonic stenosis is made in the supine position entering the chest through the third left anterior interspace. The third and sometimes the fourth rib cartilages are divided to gain exposure. The pericardium is opened and by visual and tactical senses we evaluate the lesion. Traction sutures are placed on the pericardium and the heart is further brought into the field of operation. Novocaine‡ is injected into the myocardium of the right ventricular outflow tract below the pulmonary valve. If a waist is visible (indicating a septal obstruction) below this area, a purse-string suture is placed around this procainized area, leaving a large enough center through which instruments may pass. The purse-string suture is used to control bleeding. A small incision is made in the epicardium, a small sound is insinuated in the right ventricular outflow tract, which is then palpated for septal obstruction, for septal defects and for valvular competency. If a septal obstruction is met, the sound is removed and a special rongeur, devised by us, (resembling the pituitary rongeur used by neuro-surgeons) is used to bite out the obstructing septum. This rongeur is small enough so that only a small cardiac opening is necessary and little blood loss results. Since there is so little trauma to the heart with this instrument, it can be inserted as many times as necessary. In one case, the rongeur was used seven times without detriment to the patient.

Where there is a pulmonary valvular stenosis, a universal valvulotome, devised by Bailey and modelled after the Brock knife, is used. The size of knife needed is estimated by noting the diameter of the pulmonary valve. The valvulotome is then inserted into the right ventricular outflow tract through the incision in the myocardium and is passed through the stenotic valve, cutting as it goes. The olive tip of the valvulotome is palpated in the pulmonary artery and its position judged before the actual cutting is done. The valvulotome is removed and large dilating sounds are passed to assure the competency of the lumen. If necessary, the surgeon inserts the small finger of the left hand through this heart wound into the right ventricular outflow tract to evaluate the pathology of the result obtained. The cardiac wound is closed with silk sutures and the purse-string suture is removed. We have been able to assess the degree of improvement obtained by the improved flow, the thrill and the measured increased pressure in the pulmonary artery.

The Brock procedure, we feel, can be used to advantage in all types of pulmonary stenosis, except in those patients who have infundibular stenosis. In those cases, it would require reaming out a tunnel of muscle from the right ventricular outflow tract to insure an adequate lumen and blood flow. This type of defect, we feel at this time, is best handled by a Blalock or Potts operation, if an adequate pulmonary artery exists. With the advent of open cardiac surgery, which is not too far off, even infundibular stenosis may be corrected by a direct operative attack. There is a question, however, whether this type of operation, if it creates a pulmonary hypertension, may not change the tetralogy picture into an Eisenmenger complex. If this is true (and only time will tell) the shunt operation will still be the best

‡ Novocaine is the Winthrop-Stearns registered trade-name for their brand of procaine.

solution to this infundibular type of stenosis in the tetralogies. In view of the possibility of finding an infundibular stenosis at the time of surgery, the anterior approach is still adequate to anastomose one of the systemic aortic arch vessels with the pulmonary artery and relieve the cyanosis by a shunt operation.

MITRAL COMMISSUROTOMY

The operation of mitral commissurotomy is approached in a left lateral position through the fourth interspace. No ribs are resected. The pericardium is opened anteriorly or posteriorly to the phrenic nerve and the auricular appendage exposed. The thrill in the left ventricle can be palpated; occasionally one in the left auricle can be felt. The ventricular thrill is due to the mitral stenosis or combined stenosis and regurgitation, the auricular thrill to mitral regurgitation. One usually finds regurgitation if the left auricle and auricular appendage are unusually large. Thrombi are palpated for in the appendage. If thrombi are present, the mediastinal pleura is opened and the innominate artery and left carotid artery are exposed. A bulldog clamp or Romel tourniquet is placed around the innominate artery and a strip of umbilical tape is placed around the left carotid artery. Whenever any manipulation is done on the heart or mitral valve, traction is made on the umbilical tape and may be maintained for two to three minutes, while work in the auricular appendage or on the mitral valve is carried out. In this way, the possibility of embolization to the brain is minimized. A purse-string suture is then placed about the base of the auricular appendage and anchored by a Romel tourniquet to control bleeding. A non-crushing Satinsky clamp is placed on the auricular appendage and the tip of the appendage is incised. Trabeculae are divided to secure an adequate opening for the right index finger and any clots found are evacuated. The Satinsky clamp at this point may be loosened momentarily to allow a spurt of blood to escape and flush out any clots in the appendage. We are now ready to insert the right index finger into the left auricle through the appendage and explore the left auricle, palpating the mitral valve, estimating the amount of stenosis and feeling for any regurgitation. This is where we run into trouble with the cardiologist because the reported clinical findings of regurgitation are often not verified at the operating table.

Calcification and fibrosis of the valve are easily determined. We palpate the leaflets of the valve. The smaller lateral leaflet and the larger and more important medial leaflet or aortic baffle are explored. The commissures are identified and the lateral commissure is opened or extended to the ventricular wall, if possible by digital pressure. If this is not possible, a Bailey commissurotomy knife is used to sever the roll of fibrotic tissue at the lateral commissure which makes fracturing by digital pressure impossible. Then the commissure can usually be further opened by digital pressure. If an opening of two fingers width is obtained, an adequate flow of blood will result and considerable benefit obtained for the patient. The medial commissure is not usually attacked since it is more dangerous to tackle and produces more possibility of regurgitation.

If on exploration of the mitral valve we find a severe regurgitation with a large patent and fibrotic valve, we have chosen, for the present at least, to attempt a minimal commissurotomy to see if this might free the valve leaflets enough to improve their function. On one occasion we placed a pericardial pedicle sling across the ventricular side of the mitral valve and attached it to each side of the ventricular wall to control the regurgitation. This procedure is not an adequate means of controlling mitral regurgitation and other methods are under investigation to try to solve this problem.

REVASCULARIZATION

The Beck operation for revascularizing the heart is performed through the left eighth interspace with the patient in the lateral position. A Rand respirator is used for controlled respirations during anesthesia. After opening the pleural cavity, the pulmonary ligament is incised and dissected up to the inferior pulmonary vein. The lung is displaced upward. The aorta is dissected out and inspected for arteriosclerosis. The pericardium is open-

ed widely and held open with stay sutures. The heart is inspected and the degree of infarction is noted. The coronary arteries are palpated and their degree of sclerosis and calcification is felt. If for any anatomic or pathologic reasons, the aortic coronary sinus shunt operation is not feasible, a poudrage operation is done. The coronary sinus is ligated. The epicardium and the inner surface of the pericardium are abraded and 100 milligrams of asbestos powder are rubbed over the abraded surfaces. The pericardium is closed and the operation terminated.

Beck[7] says that this procedure, of all the poudrage operations, has produced to date the most benefit for coronary insufficiency. When conditions are favorable, the aortic coronary sinus shunt operation is completed. A suture of orlon thread is placed around the coronary sinus just before it enters the right auricle and the free ends are tucked away in the pericardial sac, to be used in the second stage of the operation. Two traction sutures of 5.0 silk are placed in the coronary sinus. This clamp allows suturing in the wall of the vein in a bloodless field. An incision is made between the 5.0 traction sutures, exposing the lumen of the sinus. A vein graft, previously taken from the patient's arm, is sutured to the coronary sinus. A site is chosen on the aorta for suturing the other end of the graft. A special aortic exteriorizing clamp is placed on the aorta. An incision, about 5 millimeters long is made in the aortic wall and the free end of the graft is sutured to this opening. With the release of the aortic clamp, red blood is seen to flow into the graft and into the coronary sinus and right auricle. By pulling upon the orlon suture, previously placed, we can obstruct the tributaries, indicating a retrograde flow of arterial blood into these vessels and demonstrating the successful conclusion of the first stage of the operation. The pericardium is closed so as to protect the graft and the first stage is terminated. After three or four weeks the chest is again opened and the patency of the graft is noted. The orlon suture is dissected out and tied down on the sinus over a measuring stick so that the opening of the coronary sinus into the right auricle will be 2.5 to 3.5 millimeters in diameter. The pericardium is closed and the operation is terminated.

PROBLEMS UNDER STUDY

The cardiovascular team at St. Michael's Hospital has been engaged in many investigations in the dog laboratory and in the postmortem room. We have been experimenting in the past year with caval occlusion as a means of doing cardiac surgery on the open heart chambers in a relatively bloodless field. By this technic, one temporarily occludes the superior and inferior vena cavae and thereby keeps blood out of the right side of the heart, except for that which comes from the coronary sinus and anterior cardiac veins. We have been able to explore the heart chambers of dogs for intermittent periods of three minutes with this caval occlusion technic without cerebral damage. We have been able to create and repair auricular septal defects and explore the entire right ventricular outflow tract under direct vision. In some instances, the caval occlusion procedure was augmented by gradual chilling of the heart locally, thereby decreasing its rate from 120 to as low as 62 beats a minute. Recently we have worked with Bailey and his coworkers in the dog laboratory, with hypothermia in cardiac surgery by anesthetizing the dogs and then placing them in a cooler where the body temperature of the dogs is gradually lowered to about 26 degrees Centigrade (79° F) and at times as low as 18 degrees Centigrade (64° F). At this temperature, metabolic and oxygen requirements are so low that caval occlusion procedure can be used and the heart opened relatively bloodlessly and kept open for as long as ten to twelve minutes without subsequent evidence of brain damage to these dogs. These dogs have been taught to do tricks after having gone through this type of surgery. The possibility of doing open cardiac surgery on the right side of the heart by this technic seems very real.

We have demonstrated that the aortic valve can be dilated by passing a sound through the left auricular appendage, through the mitral valve and out of the aortic outflow tract, where the sound can be felt at the valve and the valve

dilated. This maneuver is well tolerated by the dog heart and is also accomplished easily in the postmortem human heart. On dogs, we have tried other methods than the aortic coronary sinus operation for revascularizing the heart. Attempts have been made to anastomose the splenic artery to the coronary sinus but without success. We also used the internal mammary artery and placed it in the lumen of the coronary sinus to give it arterial blood but without success. Whenever these smaller arteries were taken from their anatomic site and their adventitia stripped from them, they contracted and their lumen and blood flow diminished considerably. For this reason, the use of a small artery seems impracticable. We have also used a polythene tube to bring arterial blood from the left ventricle directly to the coronary sinus. This was accomplished easily by placing a purse-string around the coronary sinus, opening the wall of the sinus and forcing a pointed polythene tube through the floor of the coronary sinus, through the musculature of the ventricular wall, past the attachment of the mitral valve leaflet and into the left ventricle. Red blood was seen to pulsate from the tube satisfactorily. The tube was fixed in place and the incision in the sinus closed over. We had thus placed arterial blood in the coronary sinus in a few minutes instead of the few hours required for the aortic coronary sinus shunt operation. Since the problem of thrombosis in plastic tubes is not solved, this technic of revascularizing the heart must await the solution of that problem. We have also used the "heart-lung machine" in the dog laboratory with some success but from our experience, there appear to be many problems to be solved before routine use may be made of this extra-corporeal system of blood pumping and oxygenation. It is our opinion that successful open cardiac surgery will be first performed by the technic of hypothermia and caval occlusion.

Acknowledgment is made to Sister Angelina and the technicians of the roentgenology department in performing the angiographies and to Sister Ludovica and the technicians of the Department of Laboratories for performing the blood oxygen determinations, and to Dr. Frank M. Galioto and the Department of Anesthesiology for their valuable assistance.

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BACTEROIDES INFECTIONS

The bacteroides organisms, a large group of anaerobic, non-sporulating bacilli, have been generally neglected by physicians as pathogenic bacteria. They are normal inhabitants of the mucous membranes of the body, and have hitherto been considered as of no clinical significance. To counteract this erroneous impression, McVay and Sprunt* report a series of 35 cases of bacteroides-caused infection seen at the John Gaston Hospital, Memphis, Tenn., in the past five years. In 22 cases the organisms were isolated in pure culture, and in 10 cases they were associated with other bacteria. Infections with bacteroides involved the respiratory, genito-urinary, and auditory systems, and were marked by prolonged debilitating illness, often with fatal outcome. Only Aureomycin® was found to be generally effective as an antibiotic agent.

These authors stress the importance of bacteroides organisms in infections of undetermined etiology that fail to respond to usual measures. Hospital laboratories should become familiar with this class of bacteria, and take steps to effect their isolation when required. Physicians are urged to be aware of the pathogenicity of this little-known group of bacteria.

* McVay, L. V., Jr., and Sprunt, D. H.: Bacteroides Infections, Annals of Internal Medicine 36:56, January, 1952.

THE NATURE OF PSYCHOTHERAPY

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In this general discussion of psychotherapy, its aims, technics, and anticipated results, psychiatry is depicted in its proper relation to other medical specialties. What the psychiatrist is trying to accomplish is described, plus features which help or impede him in his task.

Properly administered psychotherapy is a new experience for the patient and not, as often erroneously thought, a repetition of old experiences where the patient receives advice, exhortation and education. In a broad sense, every procedure undertaken by a physician has some psychological significance to the patient. This is true of a "routine" physical examination or of the prescribing of medication. The psychotherapeutic influences here are reassurance and suggestion. If the physician were to listen sympathetically and uncritically to a distressed patient, he would provide the opportunity for "catharsis" (emotional release) which is also psychotherapeutic. In many minor psychiatric disturbances, these procedures are sufficient to give relief. But many conditions cannot be treated in this manner. Reassurance here wears off rather quickly; or emotional abreaction fails to provide the expected relief. In such conditions, psychotherapy must go deeper, explore the underlying personality structure of the patient and make him aware of the conflicting forces within himself. Such therapy then has as its goal, insight. Insight means much more than providing the patient with an understanding of his conflicting tendencies. After all, human beings are supposedly rational enough to understand what is explained to them and use it successfully. However, in practice, this is insufficient therapeutically. Understanding one's difficulty on a purely *intellectual* plane without emotional participation is of little value. The resurgence of strong *feelings* belonging to the patient's past, together with an understanding of their origin, development and present place is, however, curative. It is hard for many to comprehend that there are strong forces within them of which they know nothing. Unless one undertakes such uncovering in oneself, the concept of unconscious motivation and conflict will be purely theoretical. Here lies one of the difficulties in explaining what goes on in psychotherapy. Such therapy is an intensely emotionally charged process, a living experience. It is somewhat like listening to an explorer of a strange land giving a report. While you can visualize many things, much of the actual atmosphere can be experienced only if you have been there yourself.

THE NATURE OF ANXIETY

In the center of our present concept of the psychoneurosis is the problem of anxiety. Unless one understands the meaning of anxiety one can understand neither the nature of psychoneurosis nor the process of psychotherapy. Anxiety is the "fear from within". It occurs in response to a danger sensed by the patient. Yet there is no danger apparent to the observer. On closer examination, however, it becomes clear that the patient is afraid of his own impulses be they sexual or aggressive or both. The anxiety represents then the once real or imagined fear of punishment which the authority figures (i.e. the parents) would inflict because of transgression of their prohibitions. In the adult these prohibitions have become "the conscience" which can be a worse task master than the strictest parent. Anxiety can be experienced as a warning signal when an impulse considered dangerous arises. Some children may be thwarted in expressing any of their needs and learn to regard them all as dangerous. Then every instinctive need, no matter how modified and socially acceptable, elicits this warning signal of anxiety which can paralyze appropriate action.

DEFENSES AGAINST ANXIETY

Anxiety has been experienced by all human beings at one time or another. It occurs in all degrees of intensity from mild discomfort to

disorganized panic. Since it is most often experienced as great discomfort, the psyche tries to rid itself of this intruder. This is accomplished by defense mechanisms. To be successful, they must divert attention from the anxiety-producing impulse. An example is the mechanism of projection. Here an unacceptable impulse is turned around and experienced by the patient as coming from other people. Ideas of persecution represent another "projection" of the aggressive impulses that the patient feels against others. It usually takes a pretty disturbed person to use projection as the main defense against anxiety. But almost everyone has used it at one time or another. There are many more such defense mechanisms against anxiety which are often a part of the normal makeup of people. If such simple defenses do not suffice (because of the pressure of sexual and/or aggressive drives, or because of an overstrict "conscience"), the attempt to contain anxiety leads to symptom formation. The neurotic symptom then protects the individual from a devastating anxiety. This explains the tenacity with which patients cling to their symptoms. This is why the doctor cannot "reason" them away. This gives us a clue for therapy. The meaning of the symptom and its removal can be approached only in a roundabout manner and never before the patient is sufficiently "desensitized" against his anxieties by understanding his life and behavior and his lesser fears first.

HOSTILITY TO THE THERAPIST

Psychotherapy starts with the first contact with the patient. The patient who, in addition to his symptoms, is insecure, fearful, and full of a sense of inadequacy carefully sizes up the personality of the therapist. The patient is afraid of many things: he is full of shame about others. What will happen if he reveals these things? Will the therapist take advantage of his knowledge of the patient and humiliate him by being critical or contemptuous? Many patients are not fully aware of such fears; but they will show hostility towards the therapist, making sure that he is not going to have the upper hand. They will be critical of whatever the therapist does or says, the way he dresses or walks, or what his office looks like, and so forth. The therapist knows that what the patient brings into treatment are the attitudes of the past. They were developed in relationship to early and later authorities such as parents, teachers, and bosses. He need not therefore, be offended at the patient's seemingly aggressive behavior. He can, in due time, make the patient aware of the aggressive behavior which appears in spite of the friendly neutrality of the therapist. Its appearance is clearly "irrational" at this time. The patient seeing in the therapist an authority figure (a father, or a mother representative) has simply transferred earlier acquired feeling to the therapy situation. Such transference is studied in great detail through the verbal production of the patient, his dreams and fantasies. All this is accompanied by a great deal of feeling on the part of the patient. He becomes aware again of disturbing emotions which were "forgotten" because they caused too much anxiety.

Some patients are so afraid of having any aggressive or sexual thought that the slightest reference to them would send them into a panic. Here the therapist needs all his skill and experience to decide whether the patient is ready for such an "uncovering" type of psychotherapy; or whether to use more superficial methods such as reassurance, re-education, manipulation of the environment and so on. Some patients are so inflexible that psychotherapy is very difficult or impossible. For example, the rigid character formation of the obsessive-compulsive neurotic makes him one of the most difficult to treat.

RESISTANCE TO THERAPY

All patients show "resistance" in therapy. This does not mean that the patient deliberately blocks the progress of his treatment. Resistance is an anxiety-reducing device, which occurs spontaneously. Certain thoughts, ideas or fantasies are blocked from entering awareness because of the anxiety they would create. Such blocking can take the form of the patient not having any thought to report; or by his talking about rather irrelevant matters. Sometimes he will come late or forget appointments. Since dream interpretation plays a part in this

"uncovering" therapy, the patient may suddenly produce a great number of dreams and actually avoid becoming aware of a distressing thought. Some patients have read a great deal of psychological literature and try to involve the therapist in a discussion of the merits of different schools of psychotherapy. They will glibly use such terms as oedipus complex, libido, castration anxiety, and others. The astute therapist discourages such terms and recognizes them as resistance. What troubles the patient and makes him anxious should always be put in simple clear terms depending on the intellectual and education level of the patient. In this type of therapy there is little room for an endless discussion of the patient's symptoms. In the initial sessions the symptoms are recited by the patient. Their character and duration are noted by the therapist. Then the patient will often spontaneously go on to other matters. Some will cling to a prolonged discussion of the symptomatology. This is also a form of resistance. One has to point out to these patients that the symptoms are a culmination of preceding difficulties and that discussing the effect will not eliminate the cause. It is amateurish to tell the patient that it is something in childhood that causes adult psychoneurosis. While basically this is true, it is usually misinterpreted by the patient to mean a single psychological trauma: a theory that has long been abandoned by psychiatrists. Such speculations on the part of the patient are discouraged. Nothing is taken for granted except what the patient brings into treatment.

OTHER FACTORS IN THERAPY

It should be obvious by now that the therapy described here is by no means simple. It can be full of pitfalls for the therapist, who must stay clear of the many obstacles put up by the patient in his anxiety. It is, however, a rational procedure developed by many years of experience. It is not as vague and ill defined as some would have it. If used with the right indication, the results will also be right. On the other hand, it is true that there are some intangible qualities that affect the treatment process. One of these is the personality of the therapist, which must be "right" for the patient. Among therapists of equal skill, the patient will do better with some than with others.

There are many areas in which difficulties often develop. For example, the patient's relatives can create a formidable obstacle to successful therapy. The relative who seemingly encourages treatment can be as much of a barrier to progress as the one who is "against it" from the start. For example, a mother brought her 20 year old daughter to the doctor complaining that she refused to go out, had no "dates" and was afraid of meeting people. She described her as "serious-minded" and moody. The mother wanted her to be "like other girls" her age. In the course of treatment it became apparent that the mother was precisely the person whose attitudes were most responsible for the daughter's difficulties. This domineering mother had stifled from childhood any attempt of the patient to find out things for herself, to do things on her own or to develop a measure of independence. In treatment, the resentment against being dominated and against the source of the domination became clear. The daughter came to realize that in the years of dependency, she never could do things on her own. The treatment situation enabled the patient to "uncover" the sources and development of such dependence. One can see, that such a patient, if treatment is to be successful, will have to develop "a will of her own". This is the point where the mother became panicky. True, she wanted her daughter to be always in a good mood, sociable, and pleasant. Had she known that her daughter was going to "talk back" and make her own decisions, she would have never encouraged treatment. She cannot understand why the therapist does not tell the daughter to accept all commands from the mother. Some patients are almost hopelessly tied up to an unhealthy dependency which they hate, but cannot break. Cooperation from a relative can sometimes make the difference between success or failure of therapy. However, there is usually some conflict with relatives: parents, husband, or wife. Paradoxically I have seen a wife resent the cure of her formerly impotent husband because it also made him more assertive and less dependent on her.

ROLE OF FAMILY DOCTOR

The physician referring a patient for psychotherapy should receive a diagnostic evaluation of the patient. He should not expect to be told by the psychiatrist what *specific* problems the patient has, whom he loves and whom he hates, or what kind of sex activity he prefers. It is true that physicians among themselves usually discuss their patients freely. In psychotherapy the situation is different. The patient must know that his confidence will be scrupulously respected. Most patients have been repeatedly and severely disappointed. The psychiatrist may be their last hope. Perhaps he is all that stands between the patient and utter despair or suicide. If the patient felt that what he said were to "leak out", his confidence would have been betrayed once too often. This applies even to harmless remarks or minor secrets. The patient would think immediately that his "big secrets" were also being betrayed. It is not the fact that other physicians cannot be trusted with such confidence. It is the inadvertent slip, the possibility of hinting something accidentally that will give the patient a clue that his case was discussed in detail. Sometimes the physician not trained in psychotherapy will feel that his remark to the patient could not possibly be important to him. And yet a seemingly innocent remark, revealing to the patient, can make psychotherapy more difficult or even impossible. At times patients insist that even their diagnosis should not be discussed with the referring physician and thus place the psychiatrist in a position where he has to choose between appearing rude to his colleagues or disloyal to his patients.

COURSE AND PROGNOSIS

Many physicians object to psychotherapy because of the length of the treatment and expense involved to the patient. The uncertainty of results is another frequently heard objection. Yet all these obstacles can be found in chronic "physical" illnesses too. In tuberculosis, for example, prolonged treatment is the important and the accepted procedure. Two people might have similar lesions in the lung. One will heal quickly; in another, the lesion will become worse with the same treatment and care. The inherent power to recuperate made the difference here. Psychoneurosis is also a chronic illness. Treatment is time consuming and costly. The result will also depend on the patient's inherent ability to "tolerate" past and present conflicts. While the therapist nurtures all constructive forces in the patient, he cannot create anything new in him. To evaluate the prognosis in psychological conditions is difficult since many clues are vague. They are not as visible as an x-ray film of the lungs. At times, it is necessary to take a calculated risk in a patient with a doubtful prognosis, a procedure not unknown in other branches of medicine. On the whole, however, psychotherapy follows the concept of proper indication following a diagnosis just as in medicine in general.

Uncovering psychotherapy can be compared to radical surgery. While it gives the best results, it also exposes the patient to the greatest strain. It is often necessary to be satisfied with lesser results such as a temporary symptomatic improvement without attempt at more basic changes. Here superficial psychotherapy need not be too lengthy or too expensive.

Physicians, like people in general, vary in their opinion of psychiatric procedures. Some accept it enthusiastically. Some reject it outright. Whatever the opinion, it must be based on knowledge.

186 Gregory Avenue

WILLS EYE HOSPITAL MEETING

The Wills Eye Hospital, 1601 Spring Garden Street, Philadelphia, Pa., announces that it will hold its fifth annual clinical conference of the staff and ex-residents on March 20-21.

Dr. John H. Dunnington of New York City will present the Arthur J. Bedell Lecture.

PREGNANCY COMPLICATED BY DIAPHRAGMATIC HERNIA

Herman Levy, M.D.,‡ Passaic, N. J.

Unusual severity of gastro-intestinal symptoms during pregnancy is not always due to primary hyperemesis gravidarum, but should arouse the suspicion of associated pathology. Such a case, in which diaphragmatic hernia was found, is described and its management discussed.

With the progress in x-ray technic, the diagnosis of diaphragmatic hernia is being made more frequently. In pregnancy as a rule, gastro-intestinal disturbances are ascribed to the pregnancy and considered as variations in the "morning sickness." This is true, especially if the woman previously had no gastro-intestinal disturbances. Few practitioners seem to realize that pregnancy can be a trigger mechanism, increasing intra-abdominal pressure, thus aggravating certain pre-existing conditions. Pregnant women can have stomach or gall bladder or duodenal or kidney or ureteral disorders which are made worse by increased intra-abdominal pressure. Of course, in some surgical conditions, the rising uterus acts as a supporting ledge giving temporary improvement with resulting subsequent aggravation of the chronic disease after the supporting ledge is gone, postpartum. In a diaphragmatic hernia, one would expect aggravation of symptoms because the increased intra-abdominal pressure could do only one thing: force the hernia mass upward. That is apparently what happened in the following case.

A 29 year old para I gravida III carried and delivered her first child normally. She had an early abortion ending her second pregnancy and was now in her third pregnancy. I first saw her five weeks after the last menstrual period. At that time, she complained of dizziness, and some "morning sickness". The latter had progressed to the point where she could keep nothing but small amounts of fluid on her stomach. Vomiting occurred most of the day and she became quite weak and dehydrated. Blood and a few other tests were negative. Hospitalization was advised a number of times, but she refused. No medication was of any help. Rectal suppositories of Sodium Amytal* which I have found to be valuable in such cases gave some relief. The uterus was not large enough to cause pressure symptoms, and the vomiting could still be ascribed to "routine" early pregnancy vomiting.

She then moved away and I saw nothing of her until four months later. She returned, giving a history of having been hospitalized at the Fitkin Memorial Hospital. The hospital relayed their reports to me. They had found a hiatus hernia. I had to hospitalize her again as she was still having excessive vomiting all day long as well as considerable pain in left upper quadrant and left hypochondrium. In the hospital, she could take only intravenous fluids along with sedation for about two weeks. After her symptoms subsided, our x-ray studies showed a loop of colon extending upward into the left thoracic cavity to the level of the third rib. Medial to the loop of colon and underlying the heart there was another loop of gut which was probably small intestine. The heart was not displaced. A second x-ray examination was reported as follows: "Examination of chest reveals no abnormality of heart or right lung field. Lower third of left lung field is obscured by presence of gas-distended bowel which has been noted in this location in previous examinations. The visualized left lung is clear."

The Kahn and Mazzini tests were negative. Blood was Rh Positive Type O. Urine analyses were negative. She returned home, improved, and remained in bed, in high Fowler's position and on small frequent feedings. The bowels were regulated so as to avoid tympanitic distention. Occasionally, an anodyne or sedative was given when she was uncomfortable or had some chest pain.

Three weeks before due date she again began suffering from continued left upper abdominal pain. This pain was not relieved by morphine. She was hospitalized once more. It has been my experience that any mechanical interference in pregnancy becomes proportionately worse with the development of the pregnancy in the last trimester. A large uterine fibroid, a bi-cornate uterus, a placenta previa, a fetus with the cord around the neck—any of these may prove disastrous during the final three weeks of pregnancy. For that reason, I felt that this was the time to terminate the pregnancy. Entering the hospital for that purpose, I was informed that she was showing respiratory difficulty along with her pain. She did display, mechanically, a somewhat "gasping" type of respiration pulling into play the accessory muscles of the neck and showing some lip cyanosis and prominence of the neck veins. This represented a genuine emergency. The only quick delivery possible would be by puncturing membranes and giving intravenous Pitocin.† This was done. The cervix was soft and perhaps with a better type of patient we could have done

† Pitocin is the Parke-Davis trade-name for their brand of U.S.P. oxytoxic injection.

* Trade-name of an amobarbital sodium derivative prepared by Eli Lilly and Company.

‡ Chief Obstetrician, Passaic Beth Israel Hospital.

a manual dilatation or accouchement forcé. In her case, however, to avoid the need of anesthesia, I did some manual finger dilatation: as far as I could go. Pains commenced within the hour. All of this had to be done with the patient sitting up, practically straight. Any change towards the horizontal position immediately made her breathing more difficult.

After a few hours of labor, she was ready to deliver. I delivered her, under pudendal block. Any other type of anesthesia would have been contra-indicated. Inhalation anesthesia with her mechanical chest difficulties would have been bad. Similarly, intravenous Pentothal[1] was undesirable as then she might have rotated her trunk into a position mechanically bad for her without knowing it. Within 48 hours, with head of bed raised, and oxygen, her breathing and color gradually returned to normal. She went home in a few days and has had no complaints since. We were at the terminal stage in a greater emergency than we expected. It might have been wise to have induced labor a week earlier. Hindsight is always better than foresight. The infant showed no abnormalities or complaints.

Penman[2] says that if nausea and vomiting persist past the twelfth week or appear for the first time after the first trimester, and if those symptoms do not respond to the usual treatment, they should be thoroughly investigated, for they are abnormal and under no circumstances should they be considered as physiological or psychological. A series of such cases was investigated by x-ray diagnosis with the dose of x-ray kept low so as not to harm the developing fetus. In Penman's hospital,[3] they have recently examined twelve patients with such symptoms and found hiatal hernias in four. While the condition is not rare, it is not common, and is not frequently diagnosed. In 1935, Rigler and Eneboe[4] made gastro-intestinal x-ray studies of 195 unselected women in the last trimester of pregnancy. There were 116 multiparas, 21 of whom had such hernias or 18 per cent. Of 75 primiparas, four had such hernias or five per cent. Rigler and Eneboe[4] believe that hiatal hernias seen during pregnancy are produced by intermittent but prolonged increases in intra-abdominal pressure. This explains the greater incidence of hiatal hernia in multiparas and the difficulty of visualizing the defects in the postpartum period. He submits four case reports. His first patient began having symptoms in the 32d week with relief only after vomiting. The second had symptoms from the 18th week to the 28th week. The third began having symptoms in the tenth week; her symptoms continued throughout the pregnancy so that she lost 13 pounds during the period. Although diagnosis was established by x-ray, she was given inhalation anesthesia during labor. These histories almost make one feel that the "routine heartburn" occurring in many women at the end of pregnancy (worst at night and lying in bed) could be due to pressure of abdominal contents against the diaphragm. The treatment is avoidance of the horizontal position, day or night; small repeated feedings; and avoidance of distention. The condition could be fatal. This might result from strangulation of such a hernia, with the increased difficulty of surgery at the height of pregnancy. In such situations (with obstruction, incarceration or strangulation) intubation, constant suction, oxygen and intravenous glucose are all valuable before operation. The operation is difficult. It is necessary to decide on the approach, locate the sac, separate adhesions and resect gangrenous bowel. All this is complicated by the large pregnant uterus, and according to Carter,[5] the general mortality is 73 per cent and the operative mortality is 55 per cent.

In view of these frightening figures, it would seem appropriate to induce labor medically, or otherwise, in the last three weeks of pregnancy or sooner; particularly if symptoms are present before the situation is intensified with lightning speed into a real emergency. It would seem prudent under such circumstances with such a complicating factor diagnosed or where under similar circumstances a previous pregnancy had had a difficult course to do a therapeutic abortion early in the pregnancy.

158 Lexington Avenue

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2. Penman, Robert: Western Journal of Surgery, Gynecology and Obstetrics, 17:989 (December 1951).
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4. Rigler, A., and Eneboe, Z.: Annals of the Hahnemann Medical College, 88:1 (January 1935).
5. Carter, Claude: Annals of Surgery, 156:88 (September 1952).

STATE ACTIVITIES

THE JUDICIAL COUNCIL: "ON FEE SPLITTING"

As a consequence of the resolution submitted by the Mercer County Medical Society at the 1952 Annual Meeting (complete text appeared on page 4 of the 1952 Transactions) the Judicial Council* has promulgated the following decision, as of December 28, 1952, concerning the ethical aspects of fee splitting:

As the Judicial Council of the American Medical Association set forth in its report to the House of Delegates of the American Medical Association in convention assembled at Denver, in December, 1952, Section 5 of Article VII of the Principles of Medical Ethics states: "When a patient is referred by one physician to another for consultation or for treatment, whether the physician in charge accompanies the patient or not, the giving or receiving of a commission by whatever term it may be called or under any guise or pretext whatsoever is unethical."

The Judicial Council of The Medical Society of New Jersey accepts that the term "fee splitting" as employed in the Mercer County resolution means the secret division of a fee between two physicians. It is the opinion of the Judicial Council that any *secret* division of a fee between two physicians is unethical, and should be considered as such whether the fee is distributed by an individual for services rendered or by any insurance company or agency designated for the purpose of such distribution or payment.

Attention is called to the fact that in this unethical practice of "fee splitting" the essential note is that the terms of the division of fees and the actual divisions thereof are the results of a secret or clandestine agreement entered into by the participating physicians without the knowledge and consent of the patient. In condemning such procedure as unethical the decision of the Judicial Council of The Medical Society of New Jersey is in conformity with opinions already rendered by the Judicial Council of the American College of Surgeons ("Certain Unethical Practices in Surgery," April 15, 1952).

In rendering this decision regarding the unethical character of "fee splitting," in the sense above defined, the Judicial Council of The Medical Society of New Jersey takes cognizance of the fact that separate payment of fees to two physicians both of whom actively participated in the care of the patient and both of whom are being openly compensated with the knowledge and approval of the patient, for services rendered, is not involved.

The Judicial Council of the American Medical Association in the report above referred to (Denver, 1952) commenting upon Section 5, Article VI of the Principles of Medical Ethics, has this to say: "The Council interprets this (Section 5, Article VI) to mean that the physician who takes a patient over for treatment from another physician should render a bill direct to the patient for such treatment. If this happens to be a surgical case and the doctor referring the patient assists in the operation, gives the anesthetic, or participates in any way in the treatment of the patient, the doctor so participating should render his own bill direct to the patient, and it should not be put on the surgeon's bill . . . The Judicial Council has held many times that when a surgeon renders a bill for his fee it should not include bills from colleagues who act as assistants or anesthetists, but these colleagues should render their own bills."

Likewise, Dr. Paul R. Hawley, Director of the American College of Surgeons, in a letter dated May 21, 1952, declares: "This College recognizes the contributions of others than the operating surgeon to the care of surgical patients, and the fact that such must be compensated. However, the College believes that compensation should be fixed in accordance with the contribution and not by a percentage arrangement . . . It may be administratively impossible to determine the proper division of the fee in each individual case. However, a schedule for the division can be drawn up which will set the average in each category. Massachusetts Medical Service has such a schedule."

The Judicial Council of The Medical Society of New Jersey therefore concludes that "fee splitting," applied in the commonly accepted and opprobrious sense, is a dishonest and secret procedure contrary to the ethical principles of the medical profession. It nevertheless acknowledges that the possibility exists of an ethical assignment of payment to two physicians who share in the care and treatment of a given patient, when the services are rendered and the payment is made with the knowledge and approval of the patient and when such payment is demonstrably in proportion to the worth of the services rendered by the physicians involved.

* Members of the Judicial Council are: Doctors Daniel F. Fealherston, Chairman, Francis C. Weber, Joseph M. Keating, Jacob J. Mann, and Isaac N. Patterson.

PUBLICATION OF 1953 MEMBERSHIP DIRECTORY

The 1953 Membership Directory of The Medical Society of New Jersey will be issued in mid-April. It contains the names and addresses of approximately 5,500 physicians, and the following information on 93% of those listed: name, address, telephone number, office hours, year of birth, medical school and year of graduation, type of practice, certification by specialty boards, professional memberships, hospital affiliations, and hospital staff memberships.

The Directory is published as a benefit of membership. Non-members and interested agencies may purchase copies at five dollars each. Orders should be placed in advance of the date of issuance.

Address:

The Directory Department
The Medical Society of New Jersey
315 West State Street
Trenton 8, New Jersey

AUTO LICENSE INFORMATION

William J. Dearden, New Jersey Director of Motor Vehicles, has issued the following information regarding the renewal of automobile registration plates for 1953:

License plates issued in 1952 will continue in use as long as they remain legible. Small inserts bearing the current year number will be provided for dating purposes. 1953 inserts will be issued at local Motor Vehicle Agencies on or after February 2, 1953. Mr. Dearden emphasized that registration renewals will not be issued unless the vehicle has been inspected for the second period of 1952, and the registration certificate so endorsed.

The office of The Medical Society of New Jersey has furnished the following additional information regarding the obtaining of special "MD" license plates by physicians:

"MD" registration plates for 1953 will be issued only to those physicians who do not have 1952 plates, whether regular or "MD." Those doctors who have regular plates for 1952 will be unable to obtain the special "MD" license plates until the year when new plates are issued to all automobile registrants.

Physicians desiring to obtain "MD" plates for the first time, that is, those who do not at present have any New Jersey registration plates, whether regular or "MD", may obtain them by applying directly to the Director of Motor Vehicles, Trenton, N. J., noting on the back of the registration application the medical license number issued by the State Board of Medical Examiners, and forwarding the required registration fee.

REVISED DISABILITY BENEFITS FORM

The Bureau of State Plan Disability Benefits, which handles claims under the New Jersey Temporary Disability Benefits Law, announces revision of the medical report form known as DS-7E. Completion of this form is requested in the case of claimants whose disability has become so protracted that the Bureau requires further medical information to justify the payment of continued benefits. The new form was devised after the submission of several constructive ideas by two practicing physicians in New Jersey whose suggestions were adopted almost completely by the Bureau.

Distribution and use of the new form began on January 15 and will be given to the claimant for completion by his treating physician.

PROPOSED CONSTITUTIONAL AMENDMENT

The following proposed amendment to the Constitution was approved by the House of Delegates at the 1952 Annual Meeting and will be presented for final approval at the meeting in May, 1953. The proposed amendment is herewith published in full in compliance with the constitutional provision to that effect.

ARTICLE VI — BOARD OF TRUSTEES

The Board of Trustees shall be the executive body, and shall be composed of the Immediate Past-President, President, President-Elect, two (2) Vice-Presidents, Secretary and Treasurer (by virtue of their offices), and eleven (11) members—at least two (2) from each judicial district (*delete* "who shall be elected as follows:") and *substitute* "and who shall each be elected for a term of three years, such term to commence upon expiration of the term of the then incumbent.

"From and after May 18, 1953, any member may be elected a trustee for a maximum of three full terms, provided, however, that if the first two elected terms are successive, there shall be a lapse of one year between expiration of the second and commencement of the third term. The term of any trustee commencing prior to May 18, 1953, shall not be included in the limitation of three elected terms."

OPHTHALMOLOGY — OTOLARYNGOLOGY MEETING

The New Jersey Society of Ophthalmology and Otolaryngology will hold its first annual meeting at the Hotel Dennis, Atlantic City, on March 6-7, 1953.

PROGRAM

Otolaryngology

1. Dr. LeRoy A. Schall, Professor of Laryngology, Harvard Medical School.
   a. Malignancies of the Sinuses.
   b. The Value of the Laminagram in the Diagnosis of the Diseases of the Larynx.
2. Dr. Lyman Richards, Attending Otolaryngologist, Massachusetts Institute of Technology.
   a. The Problems of Postnasal Drip.
   b. Serous Otitis Media.
3. Dr. Harry P. Schenk, Professor of Otolaryngology, University of Pennsylvania.
   a. Specific Problems in the use of Antibiotics in Otolaryngology.
   b. Management of Abnormalities of Lymphoid Tissue in the Upper Respiratory Tract.

Ophthalmology

1. Dr. John M. McLean, Professor of Ophthalmology, Cornell Medical College.
   a. Planning for Complications in Cataract Surgery.
   b. Cortical Hormones in Intraocular Surgery.
2. Dr. Isadore Givner, Attending Ophthalmologist, New York Postgraduate Hospital.
   Preventive Ophthalmology and Personal Observations Culled From Ophthalmic Practice.
3. Dr. C. L. Schepens, Chief, Retinal Service, Massachusetts Eye and Ear Infirmary.
   Newer Concepts and Treatment of Retinal Detachment (2 hours).

The scientific session will start on March 6 at 9 a.m.

Further information may be obtained from the Secretary, Dr. Albert F. Moriconi, 438 Hamilton Avenue, Trenton, N. J.

BACK COPIES WANTED

The librarian of the Jersey City Medical Center medical library has issued a request for a complete file of the JOURNAL of the Medical Society of New Jersey for the years 1937 (volume 34) through 1945 (volume 42). Any member of the society who has any or all of these issues of the JOURNAL available and is willing to donate them is requested to notify the Medical Center librarian. The library will pay express charges incurred. Further information may be obtained from: Medical Library librarian, Medical Center, Jersey City 4, N. J.

TESTIMONIAL TO DR. RUNNELLS

John E. Runnels, M.D., Medical Director and Superintendent of Bonnie Burn Sanatorium, Berkeley Heights, was honored at a testimonial dinner held in Elizabeth on December 3, 1952. The occasion was Dr. Runnells' completion of forty years in his present post. His brother, Rev. A. E. Runnells of Toronto, offered the invocation.

Dr. Runnells was specifically cited for his contributions to the treatment of pulmonary tuberculosis and for his success in rehabilitating patients with this disease.

Medical-Surgical Plan of New Jersey

"New Jersey's Blue Shield Plan"

Dear Doctor:

Here are a few timely notes that will be of practical interest to physicians in dealing with patients enrolled in Medical-Surgical Plan:

1. It is most desirable to ask each patient, particularly any patient consulting you for medical or surgical services to be rendered in hospital whether he is enrolled in Medical-Surgical Plan.

There are now approximately one million persons enrolled in the Plan, representing nearly 25 per cent of the entire population of New Jersey. In industrial areas, where Plan enrollment is particularly heavy, physicians may find that from one-third to one-half their patients are enrolled in the Plan.

By inquiring as to whether a patient is enrolled in Medical-Surgical Plan, you will avoid delay and unnecessary effort in completing Part I of the Medical-Surgical Plan Service Report, and by obtaining this information at the outset, you will obviate any misunderstanding as to whether the patient may expect to be treated on a "service benefit" basis for any required services that are covered by the Plan's Subscription Contract.

2. The services of a surgical assistant are not eligible for Plan payment and are therefore not included in Plan payment to the surgeon in an operative case.

Our correspondence shows that many physicians are not entirely clear as to the provisions of the Plan's Subscription Contract relative to the payment of a surgical assistant's fee.

The Participating Physician has agreed with the Plan to accept Plan payment as his payment in full only insofar as such payment refers to eligible services, i.e., services covered by the Subscription Contract.

The service of an assistant at operation is specifically stated in the Contract to be an *ineligible* service—not covered by the Contract.

On the other hand, Plan payment in a surgical case *does* include pre- and post-operative care rendered in the hospital by the operating surgeon or by any other physician.

3. What about medical complications in a surgical case? The Plan strives to meet the logical and accepted modes of practice. There are many primarily surgical cases where, in addition to the surgical condition, there is some complicating or concurrent medical condition not directly connected with the surgical condition, and for which definitive medical service is required. In such eligible cases, the Plan makes payment on a basis of medical days to the attending medical man, apart from and in addition to the payment to the attending surgeon whose payment includes the pre- and post-operative service which is directly associated with the surgical condition.

The medical and administrative staff of the Plan stand ready at all times to advise or assist you in your dealings with the Plan and its enrolled members.

Respectfully yours,

Royal A. Schaaf M.D.

ROYAL A. SCHAAF, M.D., President
Medical-Surgical Plan of New Jersey

NEW JERSEY STATE DEPARTMENT OF HEALTH

PUBLIC HEALTH NEWS FOR THE PHYSICIAN

SALMONELLOSIS

A type of Salmonella organism (Salmonella montevideo) was proved to be the cause of illness recently in an infant hospitalized in Washington, D. C. Two cases in infants have been reported also in Chicago and three in New York, according to the United States Public Health Service. In each case the patient's diet had included dried egg yolk, and samplings of the supply contained the same type of organism that was recovered from stool specimens of the patients. The contaminated product has been withdrawn from the market under the supervision of the U. S. Food and Drug Administration.

Physicians and hospitals are urged to report cases of salmonellosis to health officers to aid in control of this disease, which is being recognized increasingly as a cause of illness. Reporting of cases of paratyphoid fever (Salmonella paratyphi) is a legal requirement of the New Jersey State Sanitary Code. Illnesses in which other organisms of the genus Salmonella have been isolated from feces, urine, blood, or pathologic material, also should be reported promptly in order to trace the infective agent.

At the request of the United States Public Health Service, the State Department of Health will notify that agency of cases reported in this State.

THE GOVERNOR'S CONFERENCE ON THE PREVENTION OF CHRONIC ILLNESS

An all day Governor's Conference on the prevention of chronic illness which was sponsored jointly by The Medical Society of New Jersey and the State Department of Health was held at the Hotel Hildebrecht in Trenton on December 17, 1952. More than 600 representatives of the State Medical Society, health organizations, various institutions, health officers, mayors and State officials attended the conference. Dr. Harrold A. Murray, President of the Medical Society presided at the morning session and Dr. Daniel Bergsma at the afternoon session, at which time Governor Alfred E. Driscoll addressed the audience.

In opening the conference Dr. Bergsma brought out that the basic plan of the conference was "to have experts in various segments of the broad field of chronic illness control present their considered opinions and recommendations based upon the literature, recent research and their experience. We plan to extract therefrom a foundation on which to develop a control program for the next fiscal year."

Such a control program is called for following legislation enacted in 1952 (The Prevention of Chronic Illness Act) which established a Division of Chronic Illness Control in the State Department of Health. The Governor's Conference is one of the first major steps in developing this control program and is a part of a planned and continuing effort in the prevention of chronic illness. A secondary purpose of the conference was to acquaint all those attending with the problems of chronic illness and the most recent information concerning prevention and control.

The presentations of the medical experts covered a wide field of subjects which included the prevention and control of cancer, heart disease, arthritis and rheumatic disorders, diseases incident to old age, chronic alcoholism, and nutritional deficiencies of the aged. In addition to the scientific papers the conference was concluded with several short summaries of New Jersey activities presently being carried on in the field of chronic illness control by the Medical Society, State and voluntary health organizations.

Throughout the conference, the various speakers emphasized the need for an expanding program of public education in order to

disseminate the already available knowledge of means to prevent chronic illness. Dr. Edward L. Bortz, Associated Professor of Medicine at Jefferson Medical College, estimated that "50 per cent of prolonged illness can be prevented." Dr. Morton L. Levin, Assistant Medical Services Commissioner of New York State, said about 25 per cent of cancer cases could be prevented by early discovery and treatment and by avoiding "exposure to cancer-increasing chemical substances and radiations."

Governor Driscoll, in his address to the conference said "Unless something is done in the way of effective prevention, there must inevitably be vastly greater outlays for institutional care and we must bear all the additional social costs in human suffering, and in damaged home relationships."

The importance of complete medical examinations during significant epochs in an individual's life was stressed as well as the need for the development of screening devices to detect earlier evidence of disease so that individuals could be referred to physicians for accurate diagnosis and treatment before the disease becomes disabling.

The technical information presented in these various fields will be published in a special edition of the Public Health News, which will be available to all those interested in this far-reaching and very vital subject.

OBITUARIES

DR. AUGUSTUS L. BAKER, SR.

Dr. Augustus L. Baker, Sr. of Dover died in New York City on December 9, 1952 at the age of 67.

Dr. Baker received his medical degree in 1909 from Long Island Medical College. He served as intern at the J. Hood Wright Memorial and the Lying-In Hospitals of New York and the Elizabeth General Hospital. He practiced in Dover for almost forty years and was the oldest member of the active staff of Dover General Hospital. He also served as police and fire surgeon of Dover, and as post surgeon of Picatinny Arsenal.

Dr. Baker took part in many civic activities, having served on his local Boards of Education and Health and having been a member of a number of service clubs in his community. In addition he was well known for his interest and participation in pigeon racing.

DR. JOSEPH F. FORTUNATO

Dr. Joseph F. Fortunato of Newark died on December 12, 1952 at the age of 47.

Dr. Fortunato was graduated from St. Louis University Medical School in 1932 and the following year began a general practice of medicine in Newark. During World War II he served as a major. He was a member of the staffs of St. James', St. Michael's, Clara Maass Memorial and Columbus Hospitals.

DR. BARCLAY S. FUHRMANN

Dr. Barclay S. Fuhrmann of Flemington died on January 3, 1953 at the age of 67.

Dr. Fuhrmann was graduated from Hahnemann Medical College in 1907 and following a year's internship at McKinley Hospital, Trenton, commenced practicing medicine in Flemington in 1908. He was a former president of the Hunterdon County Medical Society. He was long active in Hunterdon County and New Jersey State cancer activities. He was a former member of the board of managers of the Epileptic Village at Skillman and served as Councilor for the Third Judicial District of The Medical Society of New Jersey from 1937 to 1952.

DR. CLIFFORD W. MILLS

Dr. Clifford W. Mills of Morristown died on October 12, 1952 at the age of 77.

Dr. Mills was graduated from Long Island College of Medicine in 1897. He was a member of the surgical staff of All Souls' Hospital and the Morristown Memorial Hospital, and operated a private hospital in Morristown from 1918 to 1942. He was mayor of his community in 1919. He was also a Fellow of the American College of Surgeons, past-president of the Morris County Medical Society, and an emeritus member of The Medical Society of New Jersey.

In addition Dr. Mills was well known for his horticultural activities and in 1939 he won a first prize at the New York World's Fair in the dahlia exhibit.

DR. HENRY S. RUBIN

Dr. Henry S. Rubin, formerly of Morristown, died on December 12, 1952 in Miami Beach, Florida.

Dr. Rubin was born in Bayonne in 1896 and was graduated from Columbia University College of Physicians and Surgeons in 1918. He served in the Navy during World War I, following which he practiced for many years in Morristown, where he was on the staff of All Souls' Hospital as senior attending surgeon. He was an emeritus member of The Medical Society of New Jersey.

DR. WILLIAM C. WILLIAMS

Dr. William C. Williams, Medical Director of Camden County Hospitals at Lakeland, died on December 25, 1952, aged 49.

Dr. Williams received his M.D. from Hahnemann Medical College in 1928 and interned at West Jersey Hospital. In 1930 he began private practice in Mt. Ephraim, but within a year established his office in Haddon Heights. He served as an Army medical officer during World War II, was school physician for Mt. Ephraim, and for the past ten years served as Medical Director of Camden County Hospitals, Lakeland.

COUNTY SOCIETY REPORTS

ATLANTIC COUNTY

Leonard B. Erber, M.D., Reporter

A regular monthly meeting of the *Medical Society of Atlantic County* was held at the Traymore Hotel, November 14, 1952, DR. R. D. HARLEY, presiding.

The guest speaker was DR. SAMUEL ASPER, Assistant Professor of Medicine at Johns Hopkins. His subject "Hyperthyroidism: Long-term Treatment with Anti-thyroid Drugs," was an authoritative presentation of a topic of great interest to surgeon and internist alike.

The following were elected to the society: Associate membership: DRS. JOSEPH G. STELLA, WILLIAM A. JOY, MARVIN BARNETT, EARL KANTOR, MORTON A. ROSENBLATT, JOSEPH I. ESPOSITO.

DR. MISHLER, reporting for the Broadcasting Committee, announced a new series of radio broadcasts entitled "Your Doctor." This series, sponsored by the Guild Opticians, will be transcribed and will feature professional entertainers.

DR. SASEEN reported for the Hospitalization Committee that there had been an inadequate response to the proposed group Medical-Surgical Plan, and that further action will be deferred to a later date.

DR. PETINGA read to the Society extracts of a letter from the N. J. Military District, in reference to the proposed organization in New Jersey of two more hospital corps units. He stated that remuneration would be on a reserve corps status.

The next portion of the program dealt with the subject of a new hospital for Atlantic City. The President introduced Mr. Vincent Kling, well-known hospital architect, and Mr. John Steinle, director of the Hospital Program Planning Committee of the United States Public Health Service. Mr. Kling outlined the advantages and disadvantages of the various proposed sites and probable cost of the project. He stated that the best long range program would be to retire the present plant and to build a hospital at a new site. Mr. Steinle elaborated on several of the phases relating to community responsibility. There was considerable discussion and it was apparent that this vital subject was of interest to everyone in one way or another.

A regular monthly meeting of the Society was held at the Traymore Hotel, December 12, 1952, DR. R. D. HARLEY presiding.

DR. HAROLD ZINTEL, Associate Professor of Surgery, University of Pennsylvania, spoke on "A Report on a Three Year Study of the Surgical Aspects of Essential Hypertension." He explained that the operation of combined subtotal adrenalectomy with short sympathectomy offered new hope for the eventual solution of intractable hypertension. He spoke also of the use of cortisone in the replacement therapy that these patients require.

DR. HOLLAND, reporting for the Emergency Medical Service Plan, stated that the Plan is still in active operation and satisfactorily so. He urged the continued active cooperation of all participating members.

Reporting as Treasurer, Dr. Holland asked the members for prompt payment of their dues, inasmuch as a deadline must be met to retain membership status.

The problem of improving attendance at Society meetings was broached and received considerable discussion. This matter had come before the Executive Committee at an earlier meeting, and the Secretary at that time was instructed to determine if it was against precedent to institute a plan embodying some type of compulsory attendance. Information received from the State Society disclosed, in essence, that this was primarily a matter for local societies to decide on their own. The various suggestions offered, although constructive, apparently were not satisfactory and it was announced by the President that the matter would be taken up by the Executive Committee at a later date and that a further report would follow.

DR. GLEASON reported for the Hospitalization Committee an increase of five per cent in the Blue Cross premium rates. The increase is due partly to the indiscriminate practice by some physicians of hospitalizing patients for diagnostic purposes, or for periods longer than they would ordinarily. He urged that all physicians use the Blue Cross Plan in the manner in which it was originally intended.

BERGEN COUNTY

JOHN E. MCWHORTER, M.D., Reporter

The regular monthly meeting of the *Bergen County Medical Society* was held on the evening of January 13, 1953 at Bergen Pines Hospital, Paramus, with the president, DR. G. BARTON BARLOW in the chair.

The following were elected to membership: DRS. FRANK R. BEGEN, EDWARD A. BRENT, JOHN J. VAGELL, JR. and DOROTHEA E. G. WORCESTER. DRS. M. L. LITTMAN and GEORGE C. HENNIG were advanced to regular membership from associate and courtesy status. DR. FREDERICK K. HEATH was elected to Courtesy membership and the following were elected to emeritus membership: DRS. FRANK FREELAND, ARCANGELO LIVA and CHARLES A. RICHARDSON.

A joint meeting with the Passaic County Medical Society was planned for the third Tuesday in April, the meeting to be held at the Passaic County headquarters in Paterson.

The President made announcements concerning the fourth Scientific Session of the New Jersey Heart Association to be held on March 18, a meeting of the Bergen County Dental Society in observance of National Dental Health Day on February 4, to which the medical society is invited, and the Annual Dinner of this Society to be held on the evening of February 5 in honor of the senior members of the Society.

MR. LEO KAYE from the Tuberculosis and Health Association spoke on tentative plans for a Health Fair to be held in the spring, under the sponsorship of the Bergen County Council of Social Agencies and other interested health and welfare agencies.

A symposium on "Management of Massive Upper GI Hemorrhage" was the program for the evening with the following speakers:

"Surgical Aspects"—EARL J. HALLIGAN, M.D., Chief of Surgery, Jersey City Medical Center and St. Francis Hospital.

"Medical Aspects"—LOUIS L. PERKEL, M.D., Chief of Gastro-Enterology, Jersey City Medical Center.

BURLINGTON COUNTY

William F. Betsch, M.D., Reporter

A regular meeting of the *Burlington County Medical Society* was held at the Riverton Country Club on December 11, 1952, PRESIDENT ARTHUR B. PEACOCK, M.D., presiding.

MR. HOWARD W. DAYTON, Executive Director of the New Jersey Heart Association spoke briefly on the organization, aims and achievements of the Association. The Society thereafter approved the organization of a Burlington County Chapter.

During the scientific portion of the meeting the following papers were presented:

"Gastric Surgery in a Small Hospital" by LINDSEY B. REAGAN, M.D.

"Practical Aspects of Industrial Medicine" by WILLIAM P. MULFORD, M.D.

"Management of Vaginal Bleeding in Office Practice" by RALPH VAN METER, M.D.

RICHARD S. RUDE, M.D., now of Moorestown, was elected to membership on transfer from Union County. LOUIS B. JAMESON, M.D., of Lake Pine, Medford, was elected to membership.

On January 8, 1953, a regular meeting of the *Burlington County Medical Society* was held at the Riverton Country Club. President ARTHUR B. PEACOCK, M.D., officiated.

The guest speaker was CARL A. MAXWELL, M.D., Associate Medical Director of the Kessler Institute for Rehabilitation. Dr. Maxwell outlined the Institute's work in "The Rehabilitation of Paraplegic Patients," the topic being graphically illustrated by a color-sound film.

A memoir to Dr. HOWARD M. HEBBLE who died November 20, 1952 was spread upon the minutes.

The January meeting is the time of our annual election. The following members were elected to the offices indicated:

President, F. W. METZER; President-Elect, L. E. VITERI; Vice-President, M. A. ROBBINS; Secretary, R. T. BUCKLEY; Treasurer, W. P. MULFORD; Reporter, W. F. BETSCH; Board of Censors, D. H. B. ULMER, 1956.

GLOUCESTER COUNTY

Louis K. Collins, M.D., Reporter

With DON B. WEEMS, M.D., presiding, the December meeting of the *Gloucester County Medical Society* was held the evening of the 18th at the Woodbury Country Club. A representative of the Gloucester County Visiting Nurse Society described the organization, its relation to the medical society, and the need for our cooperation and support.

RUDOLPH. T. DEPERSIA, M.D., introduced the scientific speaker, WILLIAM H. PERLOFF, M.D., Chief of the Endocrine Clinic at the Philadelphia General Hospital, and Assistant Professor of Medicine, Temple University School of Medicine. With the aid of slides, DR. PERLOFF very ably discussed "ACTH and Cortisone," and answered numerous questions from the floor.

A resolution to approve the fluoridization of water as advocated by the State Department of Health was approved.

I. N. PATTERSON, M.D., gave a comprehensive report for the Legislative Committee covering state and national affairs, including the Chiropractic Bill, the Draft Act, the threat of the I.L.O. and the Reed-Kiel Bill.

MIDDLESEX COUNTY

Harold V. Cano, M.D., Reporter

The annual dinner meeting of the *Middlesex County Medical Society*, with their wives as guests, was held at the Pines, Metuchen, on December 17, 1952.

The following were elected to associate membership: Drs. CHARLES T. BERGEN, Spotswood, CHARLES DE GROAT, Camp Kilmer, DANIEL ROSS, New Brunswick and EUGENE J. TYRRELL of Perth Amboy.

The guest speaker of the evening, MR. HARRY HERSCHFIELD, gave a very brief, but interesting account of his life from a boy on the West Coast until the present time. Mr. Herschfield was his usual witty self and held the undivided attention of his audience from beginning to end.

The following officers were unanimously elected: President—CARLYLE MORRIS, M.D., Metuchen; Vice-President—MALCOLM DUNHAM, M.D., Woodbridge; Secretary—C. J. M. HOFER, M.D., Metuchen; Treasurer—GEORGE J. KOHUT, M.D., Perth Amboy; Reporter—HAROLD V. CANO, M.D., Spotswood.

The newly elected president asked for the full cooperation of every member of the society and that each committee member be as active this year as he has been in the past.

NEW JERSEY OPHTHALMOLOGICAL SOCIETY

Charles E. Jaeckle, M.D., Secretary

The New Jersey Ophthalmological Society, which was organized in May, 1952, for the purpose of promoting the scientific progress of ophthalmology and the welfare of the public in respect to diseases of the eye, held its first annual meeting at Princeton Inn, Princeton, on December 4, 1952.

At this meeting a constitution was adopted and the following permanent officers were elected: President—ROBISON D. HARLEY, M.D., Atlantic City; Vice-President—A. RUSSELL SHERMAN, M.D., Newark; Secretary—CHARLES E. JAECKLE, M.D., East Orange; Treasurer—JAY E. MISHLER, M.D., Atlantic City. DRS. REINOLD W. TERKUILE, Ridgewood, SAMUEL M. DISKAN, Atlantic City, LEE W. HUGHES, Newark, IRVIN LEVY, Trenton, GEORGE P. MEYER, Camden and JAMES S. SHIPMAN, Camden were elected directors.

The subject "Some Recent Advances in Cataract Surgery" was discussed by DR. ELBYRNE G. GILL, Chief of the Eye Department of McGill Memorial Hospital, Roanoke, Virginia.

WOMAN'S AUXILIARY

EXECUTIVE BOARD MEETING

Mrs. Stewart Zeh Hawkes, Chairman, Press and Publicity

The Executive Board Meeting of The Woman's Auxiliary to The Medical Society of New Jersey was held on Monday, January 12 at the State Society headquarters in Trenton. Mrs. Edward H. Dyer, president, read the President's Report, which described the meetings she and the president-elect, Mrs. Frank Forte, have attended. Mrs. Forte reported on the 9th annual conference of state presidents of the Woman's Auxiliary to the American Medical Association, which was held in Chicago. She stated that auxiliaries cannot relax their efforts to combat socialized medicine.

The various state chairmen reported on their activities to date. Mrs. Paul E. Rauschenbach Jr. asked that all county auxiliaries present a program on the medical-dental school. In speaking of the chronically ill program, Mrs. Austin J. Tidaback said that Union County has a homemaker service plan well under way, with auxiliary members staffing the office five days a week. They have twelve homemakers available. Mrs. Thomas H. McGlade gave the report of the nominating committe, which will be acted upon at the Convention in May. Mrs. Clarence B. Whims told of Atlantic County's two new nurse scholarships and stated that Cape May is raising money for a scholarship. She suggested that counties unable to grant scholarships might form Future Nurses Clubs and thus stimulate interest among young girls. Your Press and Publicity Chairman, Mrs. Hawkes, asked that reports be sent in from all the counties for publication in the JOURNAL. Mrs. McGlade reported on rural community health, saying that Mercer County is sponsoring a series of weekly broadcasts called "Help Yourself To Health."

After luncheon at the Carteret Club, Mrs. Rauschenbach introduced Mr. Richard I. Nevin, Executive Officer of the Society. Mr. Nevin brought the group up to date on the medical-dental school. He said that the Society insists on a grade A medical school and will not commit itself as to location. He said that public relations assistance for the school will be financed by both the Medical and Dental Societies. Mr. Nevin discussed the possible bills to come before the Legislature this year. An active question and answer period followed Mr. Nevin's talk. In the afternoon the county presidents held a Round Table discussion.

AUXILIARY REPORTS

Atlantic County

Mrs. Harry P. Goodman, Press and Publicity Chairman

The Traymore Hotel was the scene of a membership tea and musical in honor of past presidents and new members on November 19, 1952.

Each past president received a white chrysanthemum corsage and new members were presented with a gardenia corsage by Mrs. Winn. New members at the tea included Mrs. Joseph Stella, Mrs. Marvin Barnett, Mrs. Richard Bew, and Mrs. Carl Surran, who was reinstated.

A memorial service was held in memory of the deceased past presidents.

Mrs. F. Rolfe Westney, president, conducted the business meeting. Mrs. John Naame was appointed as a new member of the Student Nurses Fund Committee. Members of the Auxiliary who cooperated with the Medical Society of Atlantic County during "Better Breakfast Week" were cited for their work. A committee was appointed to revise the constitution and by-laws. The auxiliary voted to sponsor two additional nurses in training, through the Nurse Scholarship Fund.

Mrs. Max Gross, program chairman, presented an interesting history of the Auxiliary, dating back to the first meeting and the organization of the Auxiliary in June, 1927.

The regular monthly meeting of the auxiliary was held Friday, December 12, 1952, at the Traymore Hotel. Mrs. F. Rolfe Westney presided.

Mrs. Samuel Diskan, chairman of the Nurse Student Fund, introduced the guests of the evening, Miss Barbara Bevins and Miss Maxine Stacey, student nurses at the Atlantic City Hospital.

Mrs. G. Ruffin Stamps, chairman of the Revision Committee, presented the revised constitution and by-laws to the auxiliary.

Following the business meeting, the members of the County Medical Society joined the auxiliary for a musical Christmas party.

The auxiliary met on Friday evening, January

9, 1953, at the Traymore Hotel. Mrs. Rolfe Westney, president, presided. Mrs. Lawrence Wilson, Chairman of Civilian Defense, read a paper on that subject and distributed literature which contained helpful information in case of enemy attack. Auxiliary members were asked to volunteer their services. Mrs. Harry Subin, Chairman of Nurse Recruitment, spoke about the Future Nurses Clubs which are being formed in an effort to stimulate interest in nursing careers. Mrs. Clarence Whims, State Chairman of Nurse Recruitment, gave a detailed report on the clubs regarding their purpose, function and membership. She said that they have proved beneficial in a vocational guidance capacity and that they are made up of junior and senior high school girls. The clubs are sponsored by Mother's Clubs, women's clubs and medical auxiliaries. Concluding the program, Mrs. Subin stated that a great effort is being made to form these clubs in Atlantic County and asked that the Auxiliary members assist in this project.

Essex County

Mrs. Louis L. Covino, Chairman Press & Publicity

The Woman's Auxiliary to the Essex County Medical Society held its November, 1952 Meeting at the Academy of Medicine, Newark, on the 28th. Mrs. Jerome Kaufman, president, presided at the meeting. Plans for our Silver Anniversary Dance were presented to the group by the Dance Committee headed by Mrs. Joseph Clarken. The entire proceeds of the dance will benefit our Nurse Scholarship Fund. The program chairman, Mrs. Philip D'Ambola, presented Amy Howe André, dramatic actress and monologist of stage and radio, who entertained.

The Essex County Tuberculosis League opened their 1952 Christmas Seal Campaign on December 18, at a breakfast at Bamberger's, Newark. Mrs. Lucien Della Fera was co-chairman of this affair and Mrs. Anthony Giannotto was chosen to pose with the first campaign poster that appeared in the Newark Evening News. Mrs. Frank Bellucci was booth chairman assisted by Mrs. A. D'Addario. Many members volunteered as usual to cover the League's booth during the drive.

Hudson County

Mrs. Moses Dolganos, Publicity Chairman

The Christmas party luncheon given by the auxiliary was held on December 1, 1952 at the Kresge Department Store in Newark.

The singing of the carols of all nations by the glee club of Union Hill High School, Union City, was a feature of the afternoon. The program was under the direction of Mrs. Fred Sachs. Mrs. Albert Lepis, president; Mrs. James Tsucalas and Mrs. Marshall Bergen, the hostesses, greeted the members and their guests.

The first 1953 meeting of the auxiliary was held Monday afternoon, January 5, 1953 in Murdock Hall, Jersey City Medical Center. Mrs. Albert Lepis, president, presided. Mrs. Lepis, assisted by the hostesses, Mrs. James Tsucalas and Mrs. Marshall Bergen, cordially welcomed the members and guests to the Hospitality Day festivities which followed the meeting.

At the meeting plans were made for the dessert-bridge and fashion show which will take place on February 14, St. Valentine's day, at 1:30 p.m. in Murdock Hall, Jersey City Medical Center. Mrs. Sidney Chayes and Mrs. Marie Bresev are co-chairmen.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Office Psychotherapy. L. G. Moench, M.D., 1952. Year Book Publishers. P. 310. ($6.00)

In its first half, this book has trouble getting off the ground. The second half of the book is excellent, and the chapter on "The Interview" is alone worth the price of admission. The first 150 pages are made up of obvious generalities about emotional development, occasional dogmatic statements on really very controversial points and perfectly sound concepts about psychodynamics which the general practitioner and medical student will never accept on the basis of the evidence here presented. The chapter on the neuroses is too elementary for the physician, and useless to the medical student who has access to much better explanations. The two really good sections in the first part are the ones on the emotional aspects of obstetrical practice and the excellent description of the psychoses. The material on alcoholism and drug addiction is sketchy and really not very helpful to the general practitioner.

The chapter on examination technics seems to encourage the blunt approach (though that is certainly not the author's intention). For example, "orientation is determined either indirectly (in the history) or by direct questioning". In practice, it is a faux pas for a physician to ask any non-deteriorated patient "what day is it today?". Again, Dr. Moench advises the general practitioner to include the "subtracting 7 from 100" test, which—unless gracefully introduced is patronizing to the non-deteriorated patient and unnecessary with the deteriorated one.

When he comes to describing the interview, telling a family doctor exactly how to refer a patient to a psychiatrist, and discussing what the non-psychiatric physician can do to help his emotionally disturbed patient—when it comes to these items, the author really gets into high gear. This material is superbly presented.

The book is salted with many miniature case reports which are too brief to be helpful and with 81 cartoons. Most of these cartoons are excellent. They illustrate lightly but with potent effect certain points that are hard to develop in words. A few of them are unfortunate. For example, one cartoon is captioned: "The psychoses affect all of us". It shows a patient pointing a gun at the doctor. While the text subsequently explains that most psychotics are not dangerous, the striking picture will remain engraved on the reader's mind. This is a disservice to psychiatry. Again, the last cartoon in the book is labelled "Certain symptoms are best treated lightly". It pictures a doctor giggling as he scans a case report. Here too, the text takes the curse off the implication; but the picture remains as permanent advice to take symptoms lightly.

In the round, this is a good book though. It does help the general practitioner understand and handle his emotionally disturbed patient, whether that patient presents frank "nervous" symptoms or whether he displays his emotional conflict through the body organs. And a book which accomplishes that mission is a book worth praising.

Henry A. Davidson, M.D.

Diseases of Metabolism; Detailed Methods of Diagnosis and Treatment. Edited by Garfield G. Duncan; 3rd ed. Pp. 1179. Phila., W. B. Saunders Company, 1952. ($15.00)

Since the advent of cortisone and ACTH there has been a major ignition of interest in disorders of metabolism. Add to this the progress made in the use of radioactive isotopes in clinical investigation and one can realize how important the publication of an up-to-date text becomes. This is the third edition of *Diseases of Metabolism*, the previous edition having been published 10 years ago. During this period the sensational enthusiasm attendant with the great new discoveries has been tempered with more sober evaluation. It is with this calm appraisal that the present new subject matter is introduced. There are new chapters on carbohydrate metabolism, water balance, undernutrition, disorders of the thyroid, diabetes, vitamins, and porphyrin metabolism.

Diseases of metabolism are alterations in physiology. Since any orderly discussion of such alterations must of necessity be predicated on a presentation of the normal, this text in proper fashion reviews such normal physiologic processes. Against that background is highlighted pathologic physiology as pathogenesis of the clinical pattern. Add to this a discussion of treatment of each disorder and you have a brief description of the technic employed by Duncan.

In general this book is most readable which makes it more than a reference work. This reviewer found himself immersed in it and spent hours in enjoyable re-reading old and new physiologic concepts. It is recommended to all who have an interest in pathologic physiology which should mean anyone in the practice of medicine.

Harvey E. Nussbaum, M.D.

Congenital Anomalies of the Heart and Great Vessels. By Maurice A. Schnitker, M.D. Pp. 336 with 21 illustrations, 12 tables. New York, Oxford University Press, 1952. ($8.00)

Beginning with a superb foreword by Dr. Thomas M. Durant, this compact book on congenital heart disease is a real contribution to the literature on cardiology. Within its 296 pages of reading material is a great deal of information about a branch of cardiology unencumbered by many textbooks. The information contained is new, very much abreast of the many articles which have appeared in the recent literature, and contains excellently prepared bibliographies.

As one reads through the book one notices a considerable dearth of illustrations and electrocardiographic tracings. The lack of the latter is surprising since this same author is also the author of one of the few books on the electrocardiogram in congenital cardiac disease.

The author has captured the ability to present the heart of the problem without verbosity. Each subject is covered succinctly and clearly and he has surveyed the ground very well with this compact technic.

Two sections, one devoted to a discussion of cyanosis and another briefer one on clubbed digits are extremely informative. This book has a great deal to recommend it. It reads easily, it is not heavy to hold, it presents the material in easily understandable fashion, and one can cover the subject in a fairly short time.

A. D. Dennison, Jr., M.D.

Surgery of the Eye. By Meyer Wiener, M.D., and Harold Scheie, M.D., 3rd revised ed. Pp. 449. New York, Grune and Stratton, 1952. ($15.00)

This standard text of ophthalmic surgery has been thoroughly revised. The sections on basic technics, anesthesia, operative care, cataract surgery, glaucoma surgery, and retinal detachment have been completely rewritten. Illustrations have been added, improved, and enlarged. The chapter on glaucoma surgery is particularly good, approaching the problem both from the neurovascular and gonioscopic point of view. Goniotomy and goniopuncture technics are included. The various glaucoma operations and their indications are well arranged and clearly described. A description of the Blaskovics operation for ptosis and a technic for oblique muscle surgery recommended by McLean have been added. Modern cataract procedures are thoroughly covered.

Doctor Wiener's textbook of surgery of the eye has been considered a standard work in its field since its first publication in 1939. It has now been greatly improved and brought up to date by its original author and his well-chosen co-author, Dr. Harold G. Scheie of the University of Pennsylvania.

Jonathan L. Harris, M.D.

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI **February, 1953** **No. 2**

CLINICAL EVALUATION OF A REHABILITATION PROGRAM FOR THE TUBERCULOUS

By David Leibovici, M.D., Medical Annals of the District of Columbia, May, 1952.

In 1943 the former tuberculosis sanatorium of the District of Columbia was reopened as a rehabilitation center for tuberculous patients. The center was intended to serve two important purposes: It would alleviate a serious bed shortage for the treatment of tuberculosis; and it would bridge the gap between the sanatorium treatment of the patient and his return to normal activity in the community. The purpose of the study reported here was to determine whether or not the rehabilitation program reduced the number of relapses and readmissions.

It might be well first to briefly summarize the hospital program. The hospital is a 125-bed institution under the administrative supervision of the Municipal Hospital. Patients are admitted from both the Health Department hospitals. Requirements for admission are residence in the District of Columbia, negative sputa and gastric washings, stable X-ray findings, and the ability to handle such self-care activities as dressing and attending meals in the dining room. Treatment, such as pneumothorax, pneumoperitoneum and thoracenteses, is continued. X-ray films of the chest are taken at two-month intervals. Consultation service is available through the clinic at the Municipal Hospital.

Occupational therapy is prescribed for all patients and all patients are also seen by the vocational counselor. Regular staff conferences are held. These are attended by the physician, nurses, occupational therapists, vocational counselor, and medical social worker. At conference the plan for the patient's rehabilitation is reviewed, any modification of program is decided, and finally, discharge is considered when all members agree that existing problems have been met as fully as possible.

The ideal criteria for discharge are: (1) Disease inactive, with laboratory examinations negative and X-ray appearance stable; (2) Complications, if present, either not serious or successfully treated; (3) Work capacity demonstrated and adequate for future plans; (4) If gainful employment is necessary and patient is not yet working prospects for employment fair; and (5) Social and home conditions are satisfactory.

The follow-up study was done to evaluate this program of rehabilitation. It was based on the replies to yearly follow-up letters sent to former patients, the checking of admissions to other hospitals in the District, and interviews with former patients. All information received was checked against the files of the Tuberculosis Bureau's Central Registry.

The study was limited to patients discharged from the opening of the hospital in 1943 through December 31, 1949. The status was determined as of June 30, 1951, so that the post-discharge period ranged from a minimum of 18 months to a maximum of over eight years. The follow-up was limited to those patients who were at the center more than one month and who were discharged

with inactive disease. This group of 716 patients was divided into sub-groups, according to type of discharge. In the follow-up investigation, information was obtained for 641 patients. The clinical status of 75 patients remained unknown and this group was excluded from the statistical analysis.

The analysis, then, is based upon a group of 641 discharged patients whose clinical status was known. There were 505 patients discharged with advice, of whom it was found that: 366, or 72.5 per cent, were alive and well; 80, or 15.8 per cent, were rehospitalized after their discharge from the center; 37, or 7.3 per cent, were dead of tuberculosis; 22, or 4.4 per cent were dead of other causes.

The two groups of "walk-outs" and "disciplinary discharges" have a similar rate of relapse and and death from tuberculosis, and for the purpose of study were combined into a single group of 136 discharges against advice, of whom: 60, or 44.0 per cent were alive and well; 48, or 35.0 per cent were rehospitalized; 20, or 15.0 per cent were dead of tuberculosis; 8, or 6.0 per cent were dead of other causes.

Thus, of patients discharged with medical advice, 72.5 per cent were alive and well and had never been rehospitalized; whereas, of patients discharged against medical advice, only 44 per cent were alive and well. Before concluding that the completion of rehabilitation was probably significant in the small number of relapses found in the first group, it was necessary to determine that the two groups were comparable in other respects.

Detailed comparison of the two groups showed that they were comparable with regard to age, marital status, diagnosis, treatment, onset of illness, length of hospitalization prior to transfer here, number of previous admissions to the sanatorium, and education. These factors then could not explain the difference between the two groups. Furthermore, race and sex, length of stay at this hospital, clinical condition at discharge, and alcoholic history, did not explain the differences between them.

A correct evaluation of a rehabilitation program necessitates the comparision of two groups of patients, equal in all respects except that one group shall have had rehabilitation and the other shall have been discharged without rehabilitation. Moreover, both groups should have been discharged during the same period of time. To meet such criteria in the present instance was impossible. It was necessary to compare a group discharged medically with a group discharged against advice. The patients admitted to the center are selected in one respect. They are the more cooperative patients as the non-cooperative patients either walk out or are discharged before they are ready for transfer to this hospital. The patients discharged against advice from the center had accepted the purely medical and surgical treatment of the disease but refused the rehabilitation necessary to maintain the benefits of treatment.

The patients discharged with advice had completed the activity program at the hospital; had demonstrated adequate physical capacity for their future plans; and, had vocational guidance and selective placement in employment. The patients discharged against advice had left the hospital before their physical capacity was fully developed, and before vocational plans were completed.

The aim of rehabilitation of the tuberculous is to bridge the gap between the sanatorium and the community and to effect the gradual transfer of the patient from the sanatorium to the home. When we succeed in "controlling" a patient's disease we must understand that this is occurring in a "controlled" environment. After the patient leaves the hospital, economic and social factors appear which were not evident during active treatment. In the present study it was found that patients who completed rehabilitation, and who were discharged when judged ready for return, did much better than those who did not complete their rehabilitation. Rehabilitation is a definite part of the treatment of tuberculosis and is of benefit to the community in reducing costly readmissions to the hospital, loss of earning power, and expenditure of public funds.

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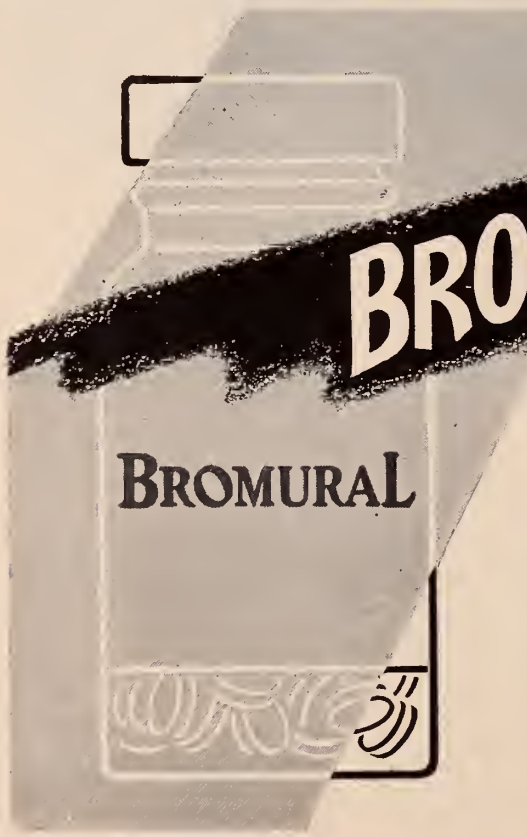
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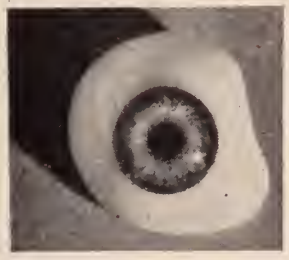
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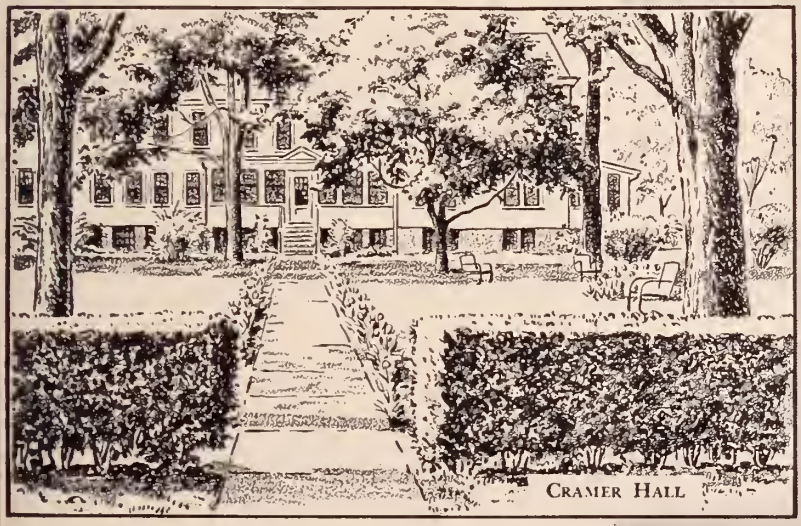
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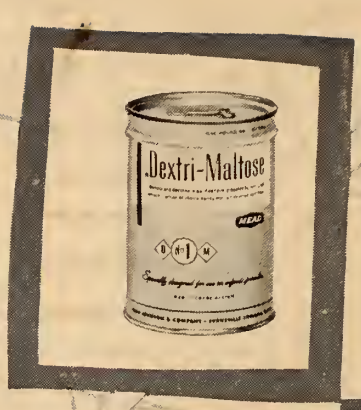
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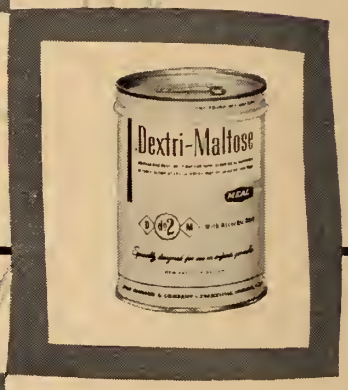


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CONTENTS—Pages 87 to 126

EDITORIALS— Page

PRESIDENT'S MESSAGE 87
GUEST EDITORIAL 88
PHYSICIAN DISTRIBUTION 89

ORIGINAL ARTICLES—

HIATUS HERNIA—Lewis F. Baum, M.D., and Otto S. Baum, M.D., South Orange, N. J. 91

ACUTE MYOCARDIAL INFARCTION WITHOUT PAIN—William Stein, M.D., New Brunswick, N. J. 95

THE PROLONGED HOME CONTROL OF INTRACTABLE ASTHMA BY INTRAVENOUS ACTH—Nathan Swern, M.D., and R. N. Cagan, M.D., Trenton, N. J. 98

PROBLEMS OF PSYCHIATRIC HOSPITALS—J. Berkeley Gordon, M.D., Marlboro, N. J. 101

THE TREATMENT OF RADIATION PNEUMONITIS WITH CORTISONE—Sanford G. Bluestein, M.D., and Jacob Roemer, M.D., Paterson, N. J. 106

SUBACUTE BACTERIAL ENDOCARDITIS IN MIDDLE AND LATER LIFE—Herman Sobol, M.D., Newark, N. J. 108

STATE ACTIVITIES— Page

L. I. C. Alumni Meeting 97
Postgraduate Course in Chest Diseases 97
Medical Women's Association Meeting 105
Nuclear Study Courses 107
EENT Section Meeting 107
Goiter Association Meeting 107
Plastic Surgery Contest 107
Trustees' Meetings 112
Cancer Diagnosis Symposia 115

MEDICAL-SURGICAL PLAN 116

PUBLIC HEALTH NEWS 117

COUNTY SOCIETY REPORTS 118

WOMAN'S AUXILIARY 121

BOOK REVIEWS 123

TUBERCULOSIS ABSTRACTS 125

Roster of Officers and Committee Chairmen, Advertising page 3A

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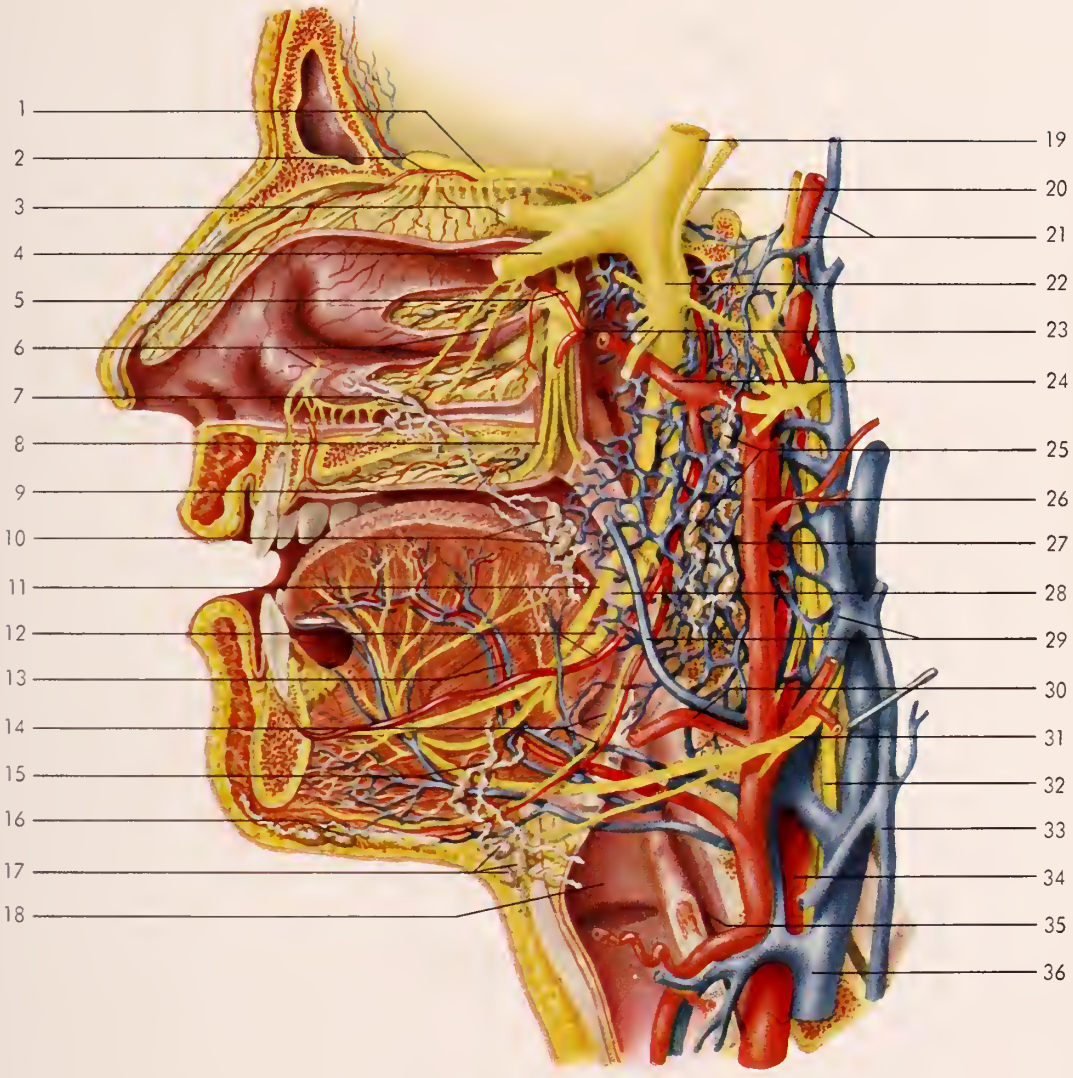
*Beckman, H.: Pharmacology in Clinical Practice, Philadelphia, W. B. Saunders Company, 1952, p. 361

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Anatomy *of the* Mouth



1. Olfactory nerve
2. Anterior ethmoidal artery
3. Ophthalmic nerve
4. Maxillary nerve
5. Sphenopalatine ganglion
6. Anterior, middle & posterior superior alveolar nerves
7. Maxillary lymph nodes
8. Anterior palatine nerve
9. Great palatine artery
10. Buccinator lymph nodes
11. Lingual nerve
12. Inferior alveolar nerve & artery
13. Lingual artery & vein
14. Mylohyoid nerve & artery
15. Supramandibular lymph nodes
16. Submental lymph nodes
17. Submaxillary lymph nodes
18. Trachea
19. Sensory root of trigeminal nerve
20. Motor root of trigeminal nerve
21. Superficial temporal artery & vein
22. Mandibular nerve
23. Sphenopalatine artery
24. Internal maxillary artery
25. Parotid lymph nodes
26. External carotid artery
27. Pterygoid venous plexus
28. Oropharynx
29. Anterior & posterior facial veins
30. External maxillary artery
31. Hypoglossal nerve
32. Vagus nerve
33. External jugular vein
34. Internal carotid artery
35. Esophagus
36. Internal jugular vein

This is one of a series of paintings by Paul Peck, illustrating the anatomy of various organs and tissues of the body which are frequently attacked by infection, where aureomycin may prove useful.

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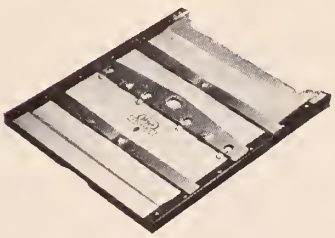
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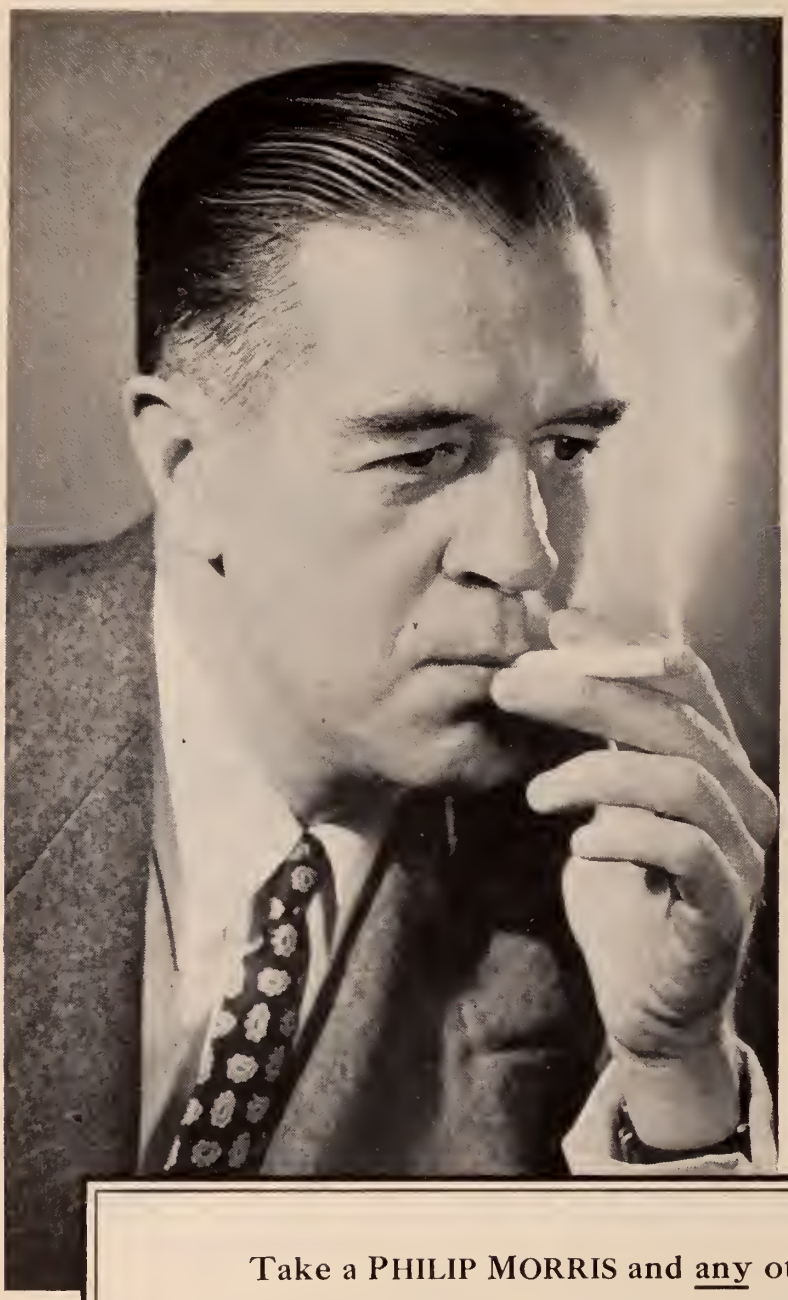
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Meat...

and the Weight Reduction Diet in Cardiac Disease

The important relationship between obesity and the outlook in cardiac disease and hypertension is vividly emphasized in a recent publication of The American Heart Association.*

For reasons not entirely understood at present, "heart disease and high blood pressure are more common in overweight persons than in those of desirable weight." The predisposition to atherosclerosis in obesity and the increased physical burden of carrying excess weight are undoubtedly contributing factors. Hence, as this publication points out, weight reduction is the first line of defense in decreasing the incidence of cardiac disease, and in improving the prognosis after cardiac disease or hypertension has developed.

Meat occupies a prominent position in the weight reduction diets outlined in this American Heart Association booklet. This recommendation is in sharp contrast to the erroneous belief held in former years that meat is harmful in hypertension or cardiac disease. "There is no evidence that red meat or any other form of protein in moderation has any adverse influence on blood pressure."

The magic formula for reducing is simply "Eat less." Two types of diets are outlined. One "allows moderate amounts of meat and other proteins, small amounts of fat and moderate amounts of carbohydrates." The other is "high in protein with plenty of meat, eggs and cheese, moderate in fat and low in carbohydrates." Diet No. 1 provides 70 Gm. of protein, 60 Gm. of fat, and 120 Gm. of carbohydrate; caloric yield, 1,300. Diet No. 2 provides 100 Gm. of protein, 80 Gm. of fat, and 60 Gm. of carbohydrate; caloric yield, 1,360.

The inclusion of generous amounts of meat in these diets—12 to 16 ounces of cooked meat or two substantial servings each day in Diet No. 2—is a reflection of the important role meat plays in any weight reduction regimen. It is generously included because of its high content of protein of excellent biologic value and because lean meat contains unobjectionably small amounts of fat.

*Food For Your Heart, a Manual for Patient and Physician, Department of Nutrition, Harvard School of Public Health, Harvard University, The American Heart Association, Inc., New York, 1952. Copies available through local Heart Association.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.



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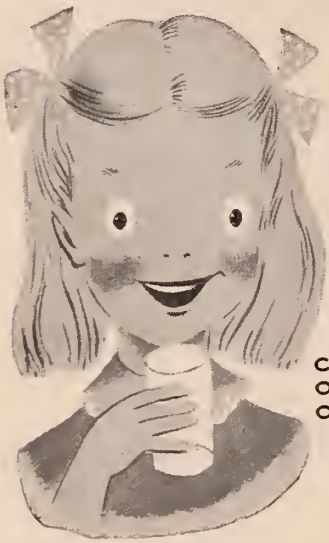
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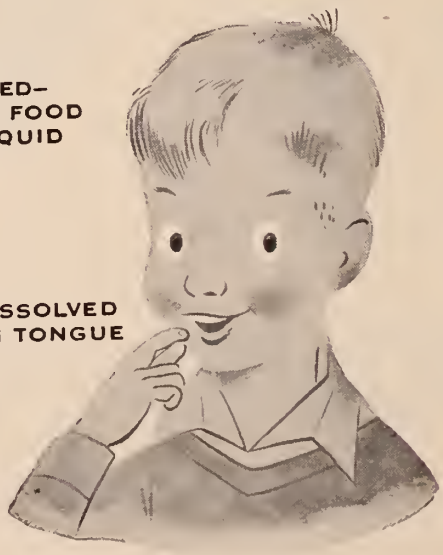
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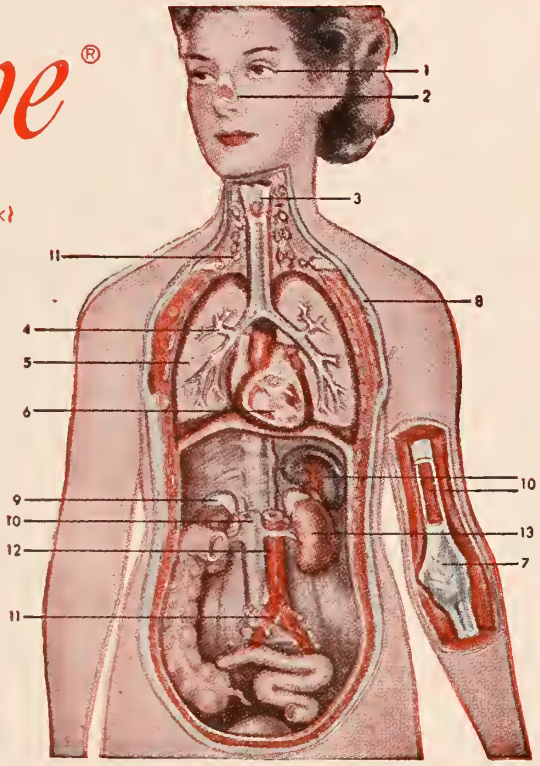
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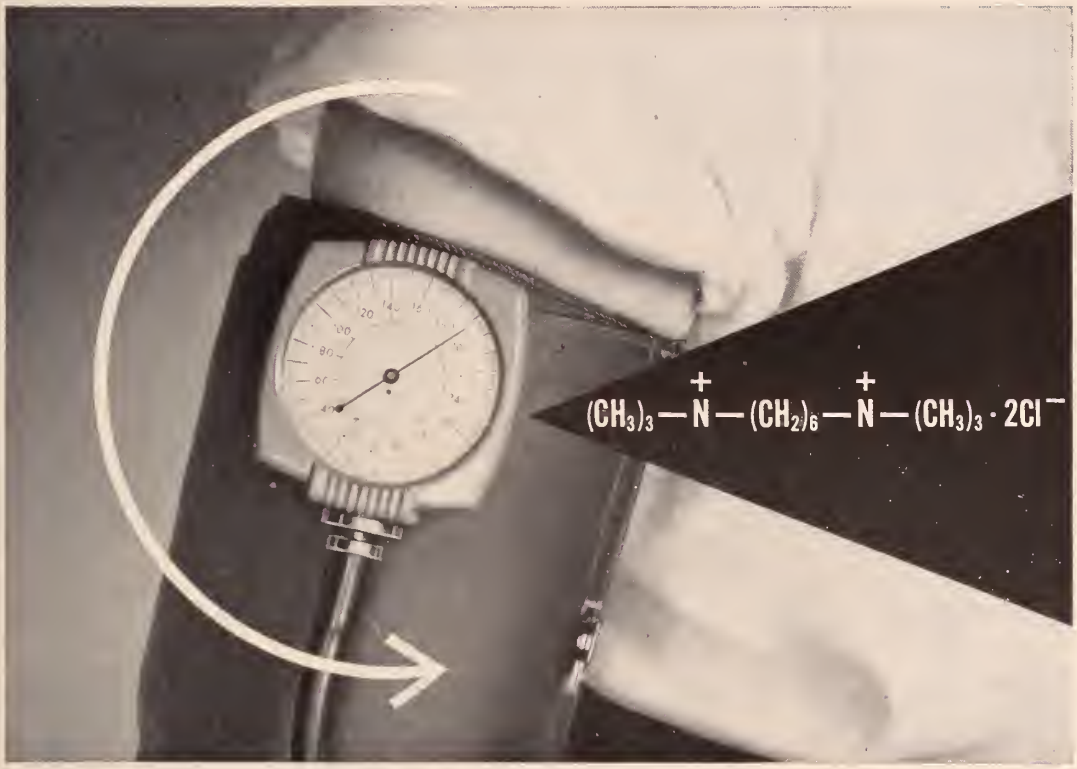
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1. Grimson, K. S., et al.: J.A.M.A. *149*:215 (May 17) 1952.



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1. Reich, W. J., et al. (1952), A Recent Advance in Estrogen Therapy. II. American J. Obst. & Gynec., 64-174, July

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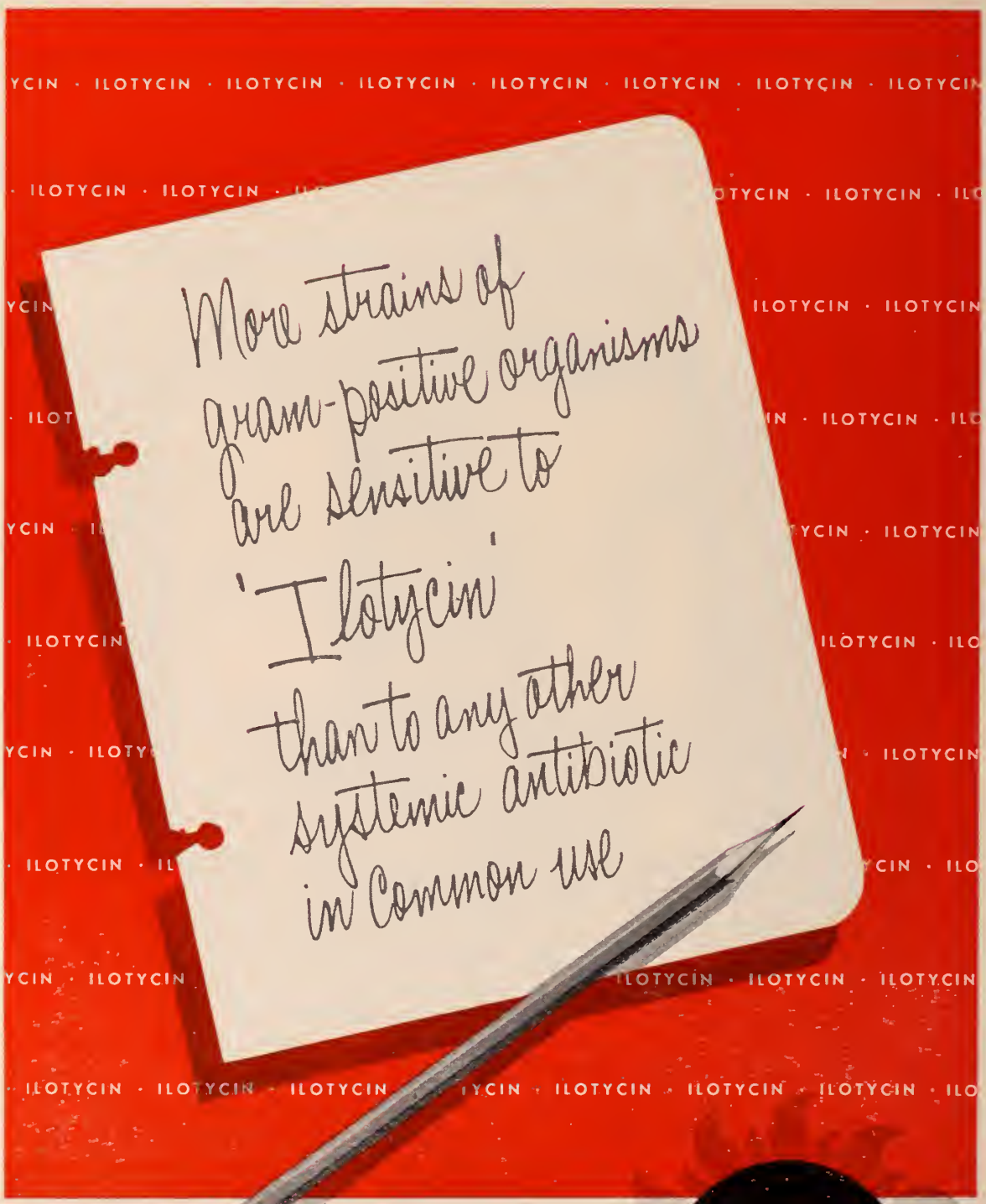
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PRESIDENT'S MESSAGE

THIS IS OUR ANSWER

In 1938 The Medical Society of New Jersey adopted as an objective, "To develop a program to make available to every man, woman and child in New Jersey adequate personal and sympathetic medical care, preventive and curative, at the lowest cost compatible with efficient service."

The medical profession believes that medical care problems can be solved on a voluntary basis, through cooperation with industry, labor and the people as a whole, within the free enterprise system. A careful study was made of the applicability of the insurance principle to medical services. The outcome was the birth of the Medical-Surgical Plan in 1942.

Its intent was a complete coverage of serious illness that requires hospitalization and creates a financial hardship for people of modest means. From a humble beginning—and with the approval of the twenty-one county societies and almost all practicing physicians, who agreed to participate under the proposed fee schedule—the Plan has grown so rapidly that within the past month the one millionth subscriber has been enrolled.

This was a cause for celebration, and the Medical Society decided to do so in a fitting manner. A dinner was given to the officers and members of the Plan's Board by the officers and trustees of the Medical Society. Representatives from labor, industry and many non-medical friends were invited to help commemorate this important milestone in the progress of a great enterprise. We of the Society who have helped by our participation should be justly proud. The great strides which the Plan has made during the past ten years should inspire us to help those who have given so willingly of their time and knowledge, as members and officers of the Board of the Plan, in furthering this work.

The Medical-Surgical Plan of New Jersey is *Our Plan*. The selection of its Board members and all new policies of the plan must be submitted to the Board of Trustees of the Medical Society for approval. Participating physicians are invited to express their suggestions concerning fee schedules and other matters through the newly formed Medical-Surgical Plan Liaison Committee. At the first meeting of the House of Delegates next May one hour will be devoted to a discussion of present and proposed policies of the Plan.

The Plan operates on a dependable insurance basis and was organized under the provisions of the law respecting "Corporations and Associations not for Profit." It is the sixth largest of the 78 "Blue Shield" plans now serving more than 24 million people throughout the United States.

When the proponents of socialized medicine ask what has The Medical Society of New Jersey done to help make available adequate medical care to the citizens of our state—This Is Our Answer.

HARROLD A. MURRAY, M.D.

GUEST EDITORIAL*

The inception of a new year is frequently heralded with impulsive resolutions. Perhaps some of us have made one or two this year. Undoubtedly by now your virtuous resolves have already been forgotten.

I would like to offer one resolution to this medical staff for the entire year of 1953: *that we work for the welfare of the patient*. A thousand words could be written about such a resolution. A few sentences must suffice at this time.

Working for the welfare of the patient means:

1. An introduction of the patient to the hospital with written information describing his complaint and written directions to those who must care for him. This is best accomplished by promptly recording the patient's history and physical examination in complete detail shortly after his admission. At the same time written orders are essential to the best care of the patient. In rare instances where emergencies prevent the attending physician from carrying out these procedures, the hospital should be notified by telephone of the incoming patient's diagnosis, and basic treatment needs. Under no circumstances should a patient be hospitalized for several hours or overnight with no diagnosis recorded, and with the nurses in the dark as to his diet, medication, et cetera.

2. An insistence that your carefully considered and individualized orders be executed. This will be accomplished by our efficient and well-trained nursing staff, with your cooperation.

3. A courteous and kindly bedside approach, so that the word hospital becomes synonymous with "hospitable."

4. A carefully written record of the daily progress, events, operations and treatments affecting your patient. I cannot comprehend a complete workup for the welfare of the patient without this.

5. A firm policy not to pauperize the patient with unnecessary procedures and expensive drugs, or a prolonged stay in the hospital.

6. A courteous attitude toward the hospital administration, clerical staff, and nursing staff—those who are trying to give your patients service.

7. Staff unity: working together, giving not getting, cooperation, not vicious grapevine rumor. The entire staff work-

*Prepared by Edward H. Willan, M.D., president of the medical staff of East Orange General Hospital, from remarks presented at the first 1953 staff meeting on January 12.

ing as a team can make the goal and the goal is the welfare of the patient.

Each year our hospital is visited by the accreditation inspector. What view he takes of our work will mean a great deal to each of us. Dr. Paul R. Hawley, addressing the joint commission of the American College of Physicians, the American Hospital Association and the Canadian Medical Association recently stated:

> "This, then, is the philosophy of hospital accreditation—that hospitals be examined from the point of view of the patient—as you would examine them if you or a member of your family were to be the patient. If they meet this test, but only if they meet this test, they should be accredited."

To the accreditation inspectors he said:

> "You do not represent the hospitals, you do not represent the doctors. Never forget that you represent the *public,* the patient and the potential patient."

As we look back over 1952 we see increasing opportunity and responsibility approaching us. To meet these challenges we are enlarging our staff and promoting men as their clinic work and service suggest. We have enlarged our nurses training school and must accept the responsibility of teaching this larger student body. We are strengthening our clinic organization and building up the number and quality of our clinical meetings. We have active participation and interest in our staff committee work. I believe we can look forward hopefully to 1953.

PHYSICIAN DISTRIBUTION

The first challenge presented by Dr. Murray in his speech to the General Session of our society on May 19, 1952, was the problem of physician distribution in New Jersey. The average doctor-patient ratio in this state is good, one per seven hundred. However, inequities in distribution do exist. Some urban and suburban areas have an overabundance of medical talent, while rural regions lack adequate medical care. Serious thought should be given to this subject, with special study of the motives that determine where a young physician sets up shop. Why do our medical graduates prefer the cities and nearby towns for a place to start?

Many factors are at play, and each individual has cogent reasons for his choice. In part they are attributable to his family background. It is well known that in general young people settle in the locale in which they were raised. The recent large population shifts from farming and rural areas to cities and suburbs is thus a self-perpetuating movement. More people are now born and brought up in cities, and hence will return there. Cities and towns offer more conveniences than rural villages; shopping and entertainment are handier, public forms of travel are easier to reach. Life in the city is more mechanized, and creature comforts more accessible. On the other hand, city life is more keenly competitive, more tense, and in a sense, more lonely. Many millions of people live in apartments without ever knowing their neighbors. In rural areas life is less hectic, neighbors more friendly, and competition less acute. For those with children, a rural atmosphere offers a healthy, outdoor existence with less danger of traffic accidents, and on the whole a better introduction to life and the wonders of nature.

Medical education today must also share the blame for the young physician's predilection for a city location. In virtually every medical school today emphasis is placed on specialty training, and general practice is relegated to a status

of lesser importance. If not trained in a specialty himself, the young graduate is imbued with the necessity for having specialty advice close at hand, and is made to feel that without highly specialized training or consultation services readily available he will be doing an inadequate job as a doctor. This is undoubtedly due to the fact that most medical school instructors are specialists themselves.

Thus for a variety of social, economic and medical reasons the young man today prefers to settle in the city. What can be done to alter this state of affairs? Little can be done to change a man's family background and place of origin before he enters medical school. However, once the medical student embarks on his career, some influence can be brought to bear toward his establishing a rural practice. First, medical schools should place greater emphasis on producing a well-rounded physician, equal to any but the most complicated situation. The medical student should not be made to feel incapable of handling his daily problems without more advanced training or advice. While still in medical school he should be given an opportunity to observe the rural practitioner at work, to share in his problems and pleasures, and to acquaint himself with the sense of satisfaction that the country doctor realizes from his work. He should learn to know the advantages of raising a family in such surroundings, and the economic and social status that the rural physician enjoys in his community.

The State of New Jersey itself will unwittingly aid in encouraging rural medicine by providing better highways, better rural schools, and better local health facilities and hospitals. Thus, the small-town physician will not feel so isolated from the large shopping and educational centers of our state.

The medical society can help meet this challenge by aiding the young physician in finding the proper home and office, by bringing together two or three young men of varied skills to establish small cooperative practices or groups, and by seeing to it that our rural hospitals have adequate laboratory and postgraduate facilities, freeing the well-trained young physician from a sense of isolation and inadequacy in his effort to bring the latest in medical care to rural regions.

Fortunately, we are a small state geographically, and with our rapidly expanding rural populations, it should not be long before all sections of the state share the high quality and abundance of medical care that our cities now enjoy.

ORIGINAL ARTICLES

HIATUS HERNIA

Lewis F. Baum, M.D., and Otto S. Baum, M.D., South Orange, N. J.

The confusion that may arise in differentiating organic from psychogenic disease is defined in these case reports. The patients treated were labelled "psychoneurotic" until careful study revealed hiatus hernia as the cause of their complaints.

The subject of hiatus hernia is well known and most textbooks describe the entity completely. We wish to draw attention to the diagnosis again and to the emotional factors involved in failure to establish the diagnosis. Our own experience has shown that the diagnosis is frequently missed, at times even despite awareness of its possibility. Nevertheless if it is kept in mind, it will be made more often, and frequently will solve many heretofore puzzling problems. In this discussion we shall confine our remarks to the paraesophageal sliding type of hiatus hernia.

The symptomatology created by this anatomic defect is varied and may simulate such conditions as angina pectoris, gall bladder disease, and peptic ulcer. It appears to occur most frequently in the obese and especially the middle-aged female, the group of patients whose emotional and menopausal problems confront the family physician. When routine gall bladder and gastrointestinal x-rays fail to reveal pathology in this group, the physician frequently labels the patient neurotic, and if he happens to have a hiatus hernia the symptoms of which are interpreted as conversion hysteria, he will continue to complain and will frequently consult one physician after another until the diagnosis is established. This process may take several years during which time true neurotic trends may manifest themselves because of increasing anxiety over the undiagnosed illness. It is this series of circumstances that we wish to stress in this presentation. Whenever a patient complains of anginoid symptoms or recurrent epigastric distress, and routine workup fails to reveal any abnormalities, he should not be dismissed until definite and repeated search for a hiatus hernia has been made, regardless of whether or not symptoms are aggravated by supine position. The following case reports illustrate the various problems:

CASE REPORTS

E. S. — The patient is a 53-year-old housewife who was first seen in January, 1951 with a history of attacks of cramping epigastric pain radiating to the back, often to the right shoulder, and associated with nausea and a burning sensation in the mid-abdomen. Attacks occurred several times a day as well as at night, lasted about 10 minutes and ceased spontaneously. There was no special food intolerance and no apparent relationship to meals. Fatigue was prominent and the patient's family felt that emotional upsets usually preceded attacks. The first attacks of pain occurred while the patient was assisting an elderly parent in walking with an artificial leg for the first time. Repeated medical consultations blamed the patient's "nerves" for the attacks. The history of menopause, caring for an aged ill mother, who finally died of gangrene of the leg and diabetes mellitus, as well as a 9-month period of bed rest with low grade fever due to bilateral thrombophlebitis were major emotionally traumatic factors leading to this impression.

Physical examination revealed a moderately obese woman. Weight 147. Height 5′ 3″. Blood pressure 122/80. The only findings of note were deep tenderness in the mid- and right epigastrium.

Old x-rays presented by the patient revealed a normal gall bladder, and a normal gastrointestinal series except for a suggestion of possible hiatus hernia. Search for this hernia was carried out. Instead, a cardiospasm with retention of barium in the lower esophagus and some esophageal dilation was demonstrated. No definite esophageal ulceration was found. A diagnosis of esophagitis with cardiospasm was made and treatment with frequent, small bland meals, Banthine,* and elimination of tobacco and alcohol was instituted. Great symptomatic improvement was noted, and six weeks later x-ray studies were repeated. On this examination there was no longer any evidence of esophageal dilation or cardiospasm. Instead a definite moderately sized sliding type of hiatus hernia was demon-

* Banthine is G. D. Searle and Company's tradename for methantheline bromide.

strated. Positional treatment was added and the patient has continued to be essentially asymptomatic. On occasion, she has experienced return of symptoms which she can now eliminate completely by taking antispasmodics and walking about. The knowledge of the presence of an anatomic abnormality removing the label "neurotic" has brought immeasurable emotional relief.

M. L. — The patient is a 51-year-old obese woman who first presented herself in 1949 with symptoms of epigastric pain and belching with no relationship to meals or type of diet for about 2 years. In August 1948, she had been treated for a detached left retina and subsequently was under treatment for early detachment of the right retina. The possibility of blindness gave her much anxiety and her abdominal complaints had been attributed to psychoneurotic conversion symptoms.

The physical examination, except for the eye findings, obesity (height 5' 2"; weight 200 lbs.) and a cervical polyp, was not remarkable. Study revealed moderate hyperacidity, cardiospasm, and a gall bladder that concentrated dye poorly, but contracted well. Antacid and antispasmodic therapy were instituted and some improvement in symptoms occurred. This was reinforced by reassurance by the ophthalmologist. Abdominal pain would recur when eye flashes increased and would cease when the ophthalmologist gave reassurance. In early 1950 the patient's symptoms changed in character, were definitely related to meals, the pain being postprandial, accompanied by nausea and made worse by the supine position. Hiatus hernia was suspected, and studies with a barium meal were carried out. A definite cardiospasm was again found, with dilatation of the lower end of the esophagus and the presence of circular negative shadows suggestive of polyps or varices. Symptoms improved with sedatives, antispasmodics and antacids, and therefore the patient refused esophagoscopy. In the summer of 1950 symptoms recurred and fluoroscopy again revealed cardiospasm, but definitely less dilatation of the esophagus. The patient was not seen again until the summer of 1951, when symptoms again recurred severely, having been present periodically during the entire year. During this whole period the patient's husband had one episode of coronary thrombosis and a great deal of business tension with loss of a large sum of money. Since the patient worked with her husband and was subjected daily to severe stresses, she herself attributed her symptoms to "nerves." Only when pain and eructations became severe and were accompanied by vomiting did she again seek medical advice. On this examination a definite hiatus hernia was demonstrated and amelioration of symptoms was brought about by positional and dietary treatment. Here again the knowledge of an anatomic defect as a cause of her symptoms with knowledge of how to relieve symptoms brought about considerable emotional relief and removed the stigma of being "neurotic."

H. P. — The patient is a 44-year-old man with chronic bronchial asthma and arrested pulmonary tuberculosis who in April 1948 first complained of high epigastric discomfort one-half to one hour following meals, usually the main evening meal. Sodium bicarbonate gave relief. Periodic pain continued until August 1948 at which time a gastrointestinal x-ray series was done and no pathology found. Search for a hiatus hernia in Trendelenburg position failed to reveal it. Subsequently symptoms continued, requiring antacid and antispasmodic therapy for relief. In May 1950 a gastrointestinal x-ray series was repeated and a large sliding hiatus hernia was demonstrated. On questioning, the patient revealed that it was his usual habit to take a nap after dinner and that pain would occur while in supine position. On a regimen of small frequent meals and the assumption of the upright position for one hour after meals the patient became asymptomatic and has remained so to date.

F. C. — The patient is a 52-year-old housewife first referred in November 1947 because of nervousness, instability, hypertension, and pain under the left breast, the latter of about 2 weeks' duration. She gave a past history of cholecystectomy and appendectomy and x-ray therapy for hyperthyroidism in 1938. She was under the care of her family physician for menopausal syndrome, receiving parenteral and oral estrogens. Physical examination revealed an obese woman weighing 210 pounds. Height 5' 4". Blood pressure 180/110. Pulse 92. The thyroid gland was enlarged and firm. There was no cardiac enlargement fluoroscopically. The remainder of the physical examination was negative. BMR was plus 8 per cent. Electrocardiogram was within normal limits except for a sinus tachycardia. The patient was next seen in November 1948 with complaints of pain in the region of the left breast, pressure under the left breast, soreness in the region of the left scapula and left upper arm, sometimes associated with palpitation. Breast pain was more severe prior to menses and less during flow. The remainder of the pain syndrome was not altered by menses. Pain was periodic, often occurred at night. Physical examination was unchanged. The BMR was plus 1 per cent. The electrocardiogram was within normal limits except for a tachycardia of 100. A gastrointestinal x-ray series and barium enema revealed no abnormalities. Search for a hiatus hernia was carried out in Trendelenburg position but it was not demonstrated. In July 1951, the patient was again seen because of continuing complaints of periodic pain, often at night, in the region of the lower sternum, left breast and left scapula. She noticed that night pain could often be prevented by eating dinner at 5 p.m. rather than at her accustomed hour of 7 p.m. Physical examination again revealed obesity, with a weight of 196 pounds. Blood pressure 200/110. No other findings of note. Electrocardiogram within normal limits. Gastrointestinal x-ray series revealed a hiatus hernia. Conservative therapy gave considerable symptomatic improvement.

B. O. — The patient is a 65-year-old man who was first seen in June 1949 with complaints of severe heartburn, nausea and substernal oppression of several hours' duration. The heartburn had been present periodically for 35 years. Sodium bicarbonate, in powder form only, always gave immediate relief, but other antacids had no effect on the symptoms. Gastric analysis 25 years and 4 years previously had revealed achlorhydria. Physical examination was entirely negative except for the presence

of a coated tongue. The electrocardiogram was within normal limits. Fluoroscopy of the upper gastrointestinal tract revealed only pylorospasm.

He was next seen in June 1950, still complaining of postprandial heartburn, and of a change in bowel habits for the past month. Instead of one daily evacuation in the morning, he now had a second one accompanied by cramps at about 11 a.m. Physical examination was negative and antispasmodics relieved symptoms rapidly so that a suggested gastrointestinal series and barium enema were not done.

The patient was next seen in July 1951, still complaining of steady heartburn requiring sodium bicarbonate for relief after every meal, the relief sometimes lasting until the next meal. Belching also gave some relief. There were no other complaints. Physical examination was again entirely negative. Gastric analysis showed no free fasting HCl but after histamine there were 25 degrees free HCl at the end of one hour and 47 degrees total acid. Gastrointestinal x-ray series showed the presence of a small but definite hiatus hernia. With positional therapy there has been symptomatic improvement.

W. T. — The patient is a 70-year-old man seen first in 1946 at which time he had a multiplicity of complaints including lassitude, insomnia, morning occipital headaches, chronic indigestion and emotional instability. For about one year he had complained of a precordial sense of suffocation, worse with excitement and occasionally with exertion. He also complained of a backache radiating through to the epigastrium and up to the back of the neck, worse after eating. He always worked under high tension in his business and was a perfectionist. He had a past history of "nervous breakdown" with aphasia in 1930 and cholecystectomy, appendectomy, and removal of colonic diverticula in 1930. On physical examination he appeared younger than his stated age, was anxious and tense but there were no findings of note. Urinalysis, blood count, glucose tolerance curve and electrocardiogram all were within normal limits.

In 1948 the patient was seen again complaining of vertigo, tight sensations in head, insomnia, mental depression, inability to find the right words to use. Except for a slight intention tremor, physical examination again was negative.

In 1951, the patient returned because of a 2 year history of mid- and lower quadrant abdominal distress, intensified by bending forward, recently shifting to left lower quadrant and radiating to the back and to the back of the neck as previously. There was no relation of pain to meals although for many years he had complained of "gas" in left upper quadrant. Relief usually followed passage of flatus. Symptoms of 1948 had disappeared spontaneously. Physical examination was again negative. Urinalysis negative. Stool negative for occult blood. Blood count normal. Gastrointestinal series revealed a hiatus hernia involving about one fifth of the stomach. On conservative therapy the patient obtained considerable symptomatic improvement, and the demonstration of an organic abnormality removed — in his opinion — what he had considered the stigma of being labeled a psychoneurotic.

Mrs. T. — The patient was a 64-year-old woman seen first in March 1946 with menopausal complaints and hypertension of about 6 years' duration, and a history of cerebral vascular accident 4 years previously with no residuals. Positive physical findings included a blood pressure of 192/116, nasal septal perforation following an old cauterization, arterio-venous compression in the ocular fundi, mild cystocele, small cervical erosion. She was markedly unstable emotionally and cried easily during the examination. Chest fluoroscopy revealed a tortuous aorta and minimal left ventricular enlargement. Skull films were negative. The electrocardiogram was within normal limits. Urinalysis and blood count were normal. Therapy consisting of sedation and vasodilators was instituted. After 4 months of treatment she was improved until March 1947 when symptoms of headache recurred and retinal angiospasm and a blood pressure of 216/114 were found. With sedation, intravenous glucose and aminophylline symptoms ceased and the blood pressure dropped to 180/90 and after sleep to 132/80. She subsequently had many similar blood pressure changes which always responded promptly to treatment.

The patient also had periodic complaints of abdominal fullness, bloating, belching, and occasional sour eructations, relieved by antacids. On 2 occasions in 1948 and 1949 and thrice in 1951 she had attacks of pressure in the epigastrium and belching. These attacks were described as "frightening," cramplike, originating deep in the left lower chest. Fluoroscopy and x-ray in September 1951 showed a definite hiatus hernia. The patient died in February 1952 of a myocardial infarction. Postmortem examination verified the diagnosis of paraesophageal hernia.

Mrs. T. — Patient is a 52-year-old housewife with known but functionally insignificant mitral stenosis and insufficiency since early adolescence, who within the past 6 years complained of periodic precordial distress with occasional radiation to the left arm, and occasional association of faintness and nausea. Intermittent episodes of epigastric pain and heartburn were also noted. Except for the presence of murmurs and of periodic secondary anemia all studies including electrocardiograms were normal. Symptoms were thought in past to be menopausal in origin; the relation of the mitral lesion was not believed of significance because of failure to demonstrate left auricular enlargement. X-rays in Trendelenburg position revealed a moderate-sized hiatus hernia, without evidence of ulceration. In retrospect the secondary anemia may very well have been caused by previous ulceration in the herniated portion of the stomach. Postural therapy relieved all symptoms of precordial and epigastric distress.

Mrs. M. — is a 75-year-old woman who for years has complained of "gas" in her left upper abdomen, with associated upper quadrant pain, belching and sour eructations, and severe heartburn, relieved only by sodium bicarbonate. Symptoms were exacerbated since 1949, and she blamed them on penicillin given for lobar pneumonia; at intervals of 2 to 3 weeks since then she has had periods of

gagging and vomiting lasting 2-3 days. Her family related these "spells" to nervous tension and emotional upsets. The patient was found to have bronchiectasis of the left lower lobe, pulmonary fibrosis and emphysema, and a multiple adenomatous colloid goiter. Gastrointestinal series in April 1952 showed a definite paraesophageal hernia, as well as diverticulosis of the sigmoid colon. Treatment has consisted of bland diet, antacids, and insistence on upright posture after meals; under this regimen the patient has been essentially symptom-free for the past 6 months.

DISCUSSION

From a study of the above cases several facts stand out. In most cases the patients have complained for several years before a diagnosis was established. In most cases, because of negative x-ray findings, they were labeled neurotics. This is understandable from the viewpoint of a physician confronted with a patient who has an emotionally traumatic background, a negative physical examination and a negative x-ray report. Routine x-rays rarely show the pathology, and a definite search for the hernia must be made with the patient in Trendelenburg position. It is our practice after doing routine standing and supine fluoroscopy to observe the patient in Trendelenburg position in deep expiration. The positive pressure exerted thereby or by manual abdominal pressure frequently causes the hernial sac to slide into the chest. It is interesting to note that even when a definite attempt to demonstrate the hernia is made, it frequently is not demonstrable on the first examination and shows up on re-examination. One can speculate as to the cause of this phenomenon. Edema at the cardia and at the mouth of the sac in a temporarily fixed hernia may account for it and give rise to the findings of cardiospasm and dilatation of the lower end of the esophagus. Subsequently, after antispasmodic and dietary therapy the hernia may be demonstrable. In several of the above cases such failure to demonstrate the hernia occurred, and only on re-examination was the correct diagnosis established. Therefore, where the diagnosis of hiatus hernia is suspected and the defect not demonstrated, re-examination should be done after a four to six week period. During this time the patient should be on a diet of frequent small bland meals. The upright position should be assumed for at least one hour after each meal, and antispasmodic and antacid medication should be administered. It must be remembered that on occasion ulceration occurs in the herniated stomach, and that relief of symptoms may occur due to healing of the ulcer on the above regimen. There may then be reluctance on the part of the patient to undergo what to him appears to be a useless and costly procedure. By taking the patient into complete confidence this may be obviated and a proper diagnosis established.

When by these methods a hiatus hernia has been demonstrated, the symptomatic relief is often greater than anticipated. For the most part these patients have complained for long periods of time. They have had repeated reassurance that there is really "nothing the matter with them," and that these symptoms have emotional origins. Thereupon anxiety symptoms frequently arise and becloud the picture. When the patient is given the knowledge of an organic defect which gave rise to his original symptoms, the emotional overtones frequently disappear rapidly merely because the label "neurotic" has been removed. The patient experiences a sense of well being not present for many years. If only a small percentage of the great horde of patients now classified as chronic gastric neurotics can be helped in this manner a valuable service will have been rendered.

SUMMARY

1. Sliding, paraesophageal hiatus hernia occurs more frequently than it is diagnosed.

2. Failure to establish the diagnosis by routine x-rays often labels the patient as neurotic and adds emotional symptoms to the already variable picture.

3. Several cases are presented where an accurate diagnosis removed the neurotic label and produced more than anticipated relief of symptoms.

4. Fluoroscopic search for hiatus hernia in Trendelenburg position with increased abdominal pressure should be a routine procedure in gastrointestinal radiography.

5. Not infrequently a hiatus hernia cannot be demonstrated on first examination despite adequate search, but can be visualized subsequently. Possible reasons for this are presented.

406 Centre Street

ACUTE MYOCARDIAL INFARCTION WITHOUT PAIN

William Stein, M.D., New Brunswick, N. J.

Acute myocardial infarction may occur in the absence of precordial pain. Such a case is reported, with a discussion of the underlying pathologic physiology.

The classical manifestations of myocardial infarction are well known: precordial pain, relative shock and collapse, fever, leucocytosis, increased sedimentation rate, abnormal electrocardiographic patterns, changes in quality of heart sounds and rhythm and the occasional presence of a pericardial friction rub. Each of these may be abnormally variable in degree or individually normal. We have learned to correlate them well.

Medical literature emphasizes *precordial pain* at onset. Scattered through the literature are occasional references to myocardial infarction without pain.

In this presentation I am emphasizing the importance of the occasional occurrence of myocardial infarction *without pain*. Unless one bears this possibility in mind, confusion and embarrassment may arise in the differential diagnosis. Here is a case which illustrates this possibility.

A 62 year old female was first seen in April 1948, complaining of lancinating precordial pain related to effort and emotion for at least a year. Increasing dyspnea on exertion was noticed. She had to sleep on three pillows. She was "nervous" and cried easily. The pain was so severe prior to her office visit that she had to stay in bed for three days.

Several physicians had told her that the cardiac pain was very much influenced by her "nervousness" and emotions. (There was a great deal of conflict with her husband.) Since suffering a blood clot in her left leg in 1947, she has worn a rubber stocking. Past history otherwise was negative. Family history was irrelevant except as noted. Review of systems was noncontributory.

She was a well developed and nourished female, cooperative and oriented but apprehensive. Temperature was 98.6. Heart and pulse rate were 85 and regular. Respirations were 20. Pupils were normal. Blood pressure was 190/100. Eye grounds showed moderate sclerosis of arterial vessels. She wore dentures. Ear, nose, throat, thyroid, neck, lungs and thoracic cage were normal. Heart sounds were good. No murmurs were heard and the rhythm was "regular sinus". Abdomen was negative. Liver was normal. The extremities were normal except for some varicosities of the left leg. Tendon reflexes were normal. Radial and brachial arteries showed some thickening on palpation. Dorsalis pedis and posterior tibial arteries showed good pulsation.

Fluoroscopic examination showed a moderately transverse type of heart with moderate enlargement of the left ventricle. There was a moderate diffuse widening of the aorta. Lung fields were clear and the diaphragm was normal.

The electrocardiogram showed a slight left axis deviation. Otherwise it was normal.

Diagnosis was hypertensive and arteriosclerotic heart disease.

On empirical therapy consisting of a bland low salt diet, aminophylline, phenobarbital and nitroglycerine as necessary the patient improved considerably. Blood pressure fell to 150/90. She only occasionally experienced bouts of precordial pain that were easily controlled. The patient was seen periodically and on September 2, 1948, reported relative comfort and satisfactory progress. But on September 25, the following interesting phenomenon occurred.

The patient had not been talking to her husband for four weeks, but he was driving her to my office. They parked the car, and were sitting there quietly waiting for the hour of their appointment. This was a "routine" visit. She had no complaints as she sat there. She had felt no distress since the time of her previous visit three weeks earlier, other than some increased "nervousness" and tiredness due to clashing with her husband.

As they sat there waiting she saw an automobile accident. Two cars collided. This disturbed her. She went over to offer herself as a witness. This act called forth abuse from her husband. She stayed at the scene of the accident for 5 minutes entering into the argument as to who was at fault. Her husband continued to scold her for "meddling". The patient became progressively upset all this time. She felt a feeling of "collapse and faintness" overcoming her. Her husband then rushed her into my office. She walked in and fell on the floor. She felt faint and weak but was oriented and cooperative. She was perspiring profusely. She complained of no precordial pain, oppression or discomfort. The pulse was threadlike and the rate was 115 and regular. Blood pressure was 130/80. Heart sounds were muffled and distant. She was immediately removed to St. Peter's General Hospital by ambulance. Electrocardiograms the next morning showed acute anterior myocardial infarction.

Her course was stormy for the first two weeks. She felt weak, had no appetite, was "mentally weary" and said that she hoped she would die. She was moderately dyspneic, had to be elevated in

bed, and for the first several days required oxygen. Day after day vigorous questioning on my part as to the presence of precordial pain or oppression elicited a negative answer. For the first week there was a definite rise in rectal temperature to 101. Then the temperature slowly fell to normal.

On the day of admission, hemoglobin was 15 Grams (96 per cent). Red cell count was 5,220,000, and leucocyte count was 12,450. Segmented cells accounted for 82, non-segmented for four. Two weeks later, hemoglobin was down to 89 per cent (14 Grams), red cells to 4,800,000 and white cells to 8950. On November 1, hemoglobin was 13 Grams (83 per cent), erythrocytes were 4,600,000 and white cells only 4800. Sedimentation rate (Westergen) was 99 millimeters in an hour on October 13 and 80 millimeters on November 1. Urine analyses were normal throughout. Mazzini test was negative.

The electrocardiogram on October 13 again showed serial progressive changes of acute anterior myocardial infarction.

After the first two weeks the patient continued to improve physically and spiritually. She now ate well and, above all, wanted to get better. She never at any time complained of precordial discomfort or pain. The dyspnea and relative orthopnea gradually lessened and she felt well.

From October 11 to 17, she complained of mild pain in the calf of the right leg. There was no swelling or redness but the calf was moderately tender. She showed a slight elevation of temperature to 100 degrees, but this returned to normal subsequently. The sedimentation rate was elevated to 99 millimeters. The temperature had been normal for ten days prior to this episode. I thought that the patient probably had a mild thrombophlebitis which resolved itself uneventfully.

Overall therapy consisted of a light diet, phenobarbital, morphine sulfate and atropine, Nembutal,* oxygen, and heparin and Dicumarol† administered according to the Allen method at the Mayo Clinic.

The patient was discharged home on November 9, fully ambulatory, looking well and still with no complaints relative to her precordium.

Another electrocardiogram taken six weeks later still showed the changes of acute anterior myocardial infarction.

Strangely enough the patient, since the attack, still has had no precordial stigmata of pain or oppression. I have seen her once a month routinely. Her blood pressure averages 130/80 and she takes phenobarbital to control her emotional tension and aminophylline prophylactically. In response to my question she answers "No doctor, I have no pain".

King *et al.*[1] cite the fact that in 1910 Obrastzaw and Straschesko[2] recognized that pain was not essential in the diagnosis of coronary occlusion and that Herrick[3] in 1912 called attention to the protean symptomatology in the clinical features of sudden obstruction of the coronary arteries.

Kennedy[4] reviewed the incidence of myocardial infarction without pain in 200 autopsied cases and found that 4 per cent of those of less than 8 weeks' duration experienced any subjective discomfort. An additional 4 per cent experienced some discomfort relative to the precordium suggestive of myocardial infarction but without actual pain. Of cases classified as "old infarctions" 22 per cent gave no history of discomfort.

Babey[5] surveyed 116 patients with clinical diagnosis of acute myocardial infarction and listed only one case as painless.

Pollard[6] *et al.* studied 375 cases diagnosed myocardial infarction and found an incidence of 4.5 per cent occurrence without pain.

Smith *et al.*[7] in reviewing the clinical study of 100 cases of coronary occlusion indicate that the occurrence of coronary occlusion and infarction without pain is more frequent than the figures of Kennedy, Babey and Pollard would suggest.

Levy[8] reviewed 49 proved cases of infarction of which 13 occurred without pain.

Notkin[9] reports a case of painless acute myocardial infarction and reviews the literature. He points out the relative frequency of this syndrome.

Practically all cases of myocardial infarction without pain have occurred in older people.

On the contrary, Yater *et al.*[10] in a group of 642 men between the ages of 18 and 39, with coronary artery disease in whom a history could be elicited, found that pain was present in 98 per cent of the cases.

Zoll *et al.*[11] state that the hearts of young people for practical purposes have no anastomotic arteries and that their arteries are end arteries. Their anastomoses are so small as not to have the capacity to function.

Older people because of aging, stress, strain, anginal syndrome and hypertension develop a collateral circulation of the heart.

It is agreed that heart pain is due to myocardial anoxia on the basis of inadequate circulation. Probably in older people at the time of infarction, the development of adequate circulation has been sufficient to permit the

*Nembutal is a trade-name for pentobarbital, registered by Abbott Laboratories.

†Dicumarol is the collective registered trade-name for bishydroxy coumarin—The Wisconsin Alumni Research Foundation controls the use of the word "Dicumarol".

syndrome of acute infarction without pain. By the same reasoning, this is not so in younger people.

Blumgart[12] states that adequate collateral coronary circulation is the explanation of silent occlusion. This prevents acute anoxia and ultimate necrosis of localized areas of the myocardium. "Coronary occlusion *per se* does not necessarily produce any characteristic clinical manifestations. If an occlusion occurs gradually with concomitant development of an anastomotic circulation, no symptoms or signs will be produced and no myocardial lesion will be demonstrable. Then what we speak of as coronary occlusion which consists of substernal pain with oppression, a fall in blood pressure, pallor and typical electrocardiographic changes, fever and leucocytosis, is in reality myocardial infarction."

White[13] states that if coronary obstruction and infarction develop slowly and if there is no excessive cardiac strain, there may be no symptoms even though extensive areas of damaged muscle are present and even if one or both coronary arteries are occluded.

Boas[14] in a presentation on "some immediate causes which precipitate cardiac infarction" cites common external factors as effort, emotion, cold, overeating. These factors cannot cause cardiac infarction in the presence of normal coronary arteries. Just as an unhealthy tree may stand for years until blown down by a violent wind storm, so a heart with sclerosed coronary arteries may function for years until a sudden strain overtaxes its weakened structure and leads to cessation of heart action or impairment of its structure and function with progressive heart muscle damage.

In the case here presented emotion undoubtedly was the precipitating factor. The patient must necessarily have had an adequate collateral coronary circulation to develop acute myocardial infarction without pain.

SUMMARY

An interesting case of acute myocardial infarction without pain in an elderly white female is presented. The subject is reviewed and discussed.

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177 Livingston Avenue

L. I. C. ALUMNI MEETING

The State University College of Medicine at New York City (formerly Long Island College of Medicine) will hold its annual Alumni Day on Saturday, April 25. A scientific session at the Polhemus Clinic will be followed by a business meeting, a luncheon, and an annual dinner. The dinner will be held at the Hotel Granada, Brooklyn, at 7:00 p.m. Further information may be obtained from Ruth Goodwin, Executive Secretary, at the College Office, 350 Henry Street, Brooklyn, N. Y.

POSTGRADUATE COURSE IN CHEST DISEASES

The American College of Chest Physicians and the Laennec Society of Philadelphia will present a course in diseases of the chest at the Bellevue-Stratford Hotel in Philadelphia, March 23 to 27. The tuition fee is $50.00. Further information may be obtained from the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

THE PROLONGED HOME CONTROL OF INTRACTABLE ASTHMA BY INTRAVENOUS ACTH

NATHAN SWERN, M.D., and R. N. CAGAN, M.D., Trenton, N. J.

The treatment of severe, intractable status asthmaticus is often most unrewarding and discouraging. In this case careful study showed intravenous ACTH to be not only the most effective, but also the most economic form of hormone therapy.

The relief of paroxysmal asthmatic attacks by corticotrophin (ACTH) and cortisone has been observed.[1,2] Furthermore, more recent reports have demonstrated that the prolonged use of these drugs in intractable status asthmaticus may be feasible.[3] However, the medication and the frequent intramuscular injections are costly. Therefore, since it was shown that a large portion of intramuscularly injected ACTH is wasted[4] and since Thorn demonstrated the rapid and prolonged therapeutic action of ACTH administered slowly by the intravenous route,[5] a case of severe intractable asthma, insensitive to all other medications, was treated with intravenous infusions of ACTH for extended periods at home.

CASE REPORT (Figure 1)

This 54-year-old white woman developed asthma at age 42. There had been no previous history of allergy or respiratory difficulty. At onset, the disease presented no real problem since there was only mild nonseasonal sporadic respiratory difficulty and coughing. Both symptoms were easily relieved by bronchodilators and iodides when necessary.

Except for asthma in a niece, there was no family history of allergy or asthma. The patient had six children, all living and well. Sensitivity tests revealed markedly positive intradermal reactions to coffee and asparagus; and moderately positive reactions to dust, peanut, chocolate, barley, and parsley.

Beginning May, 1951, the patient's dyspnea increased so that she averaged a moderately severe asthmatic paroxysm each week lasting two to four hours. These were relieved by intramuscular injections of aminophylline and adrenalin. Because of these attacks, the patient was placed on maintenance oral ephedrine, aminophylline and phenobarbital.

In spite of continued medication, the patient's condition deteriorated so that by August she suffered bi-weekly paroxysmal attacks of asthma, lasting several hours and necessitating intravenous aminophylline. From September, 1951 until January, 1952, the patient became worse until it was necessary to hospitallze her when she was having multiple attacks of asthma during the week prior to January 30, 1952.

In the hospital, the patient was relieved by heavy sedation and continuous intravenous infusion of aminophylline. X-rays of her sinuses and lungs revealed no abnormality. After a week in the hospital, she signed out against medical advice.

After leaving the hospital, the patient continued taking her oral medication and yet she regressed into persistent status asthmaticus which could be relieved with difficulty only by intravenous aminophylline. This relief lasted no longer than six hours and usually less.

On March 19, intravenous ACTH was begun at home, 40 milligrams per liter of 5 per cent glucose in distilled water, administered over a period of ten to twelve hours. Relief was afforded within 15 minutes after starting the infusions. Similar treatments were given on March 21 and 23. The dosage of ACTH was lowered to 20 milligrams on March 24, 26 and 28 and the interval between treatments was increased during the following weeks until the patient was receiving 20 milligrams once every five days. At no time during this period did the patient have asthmatic paroxysms.

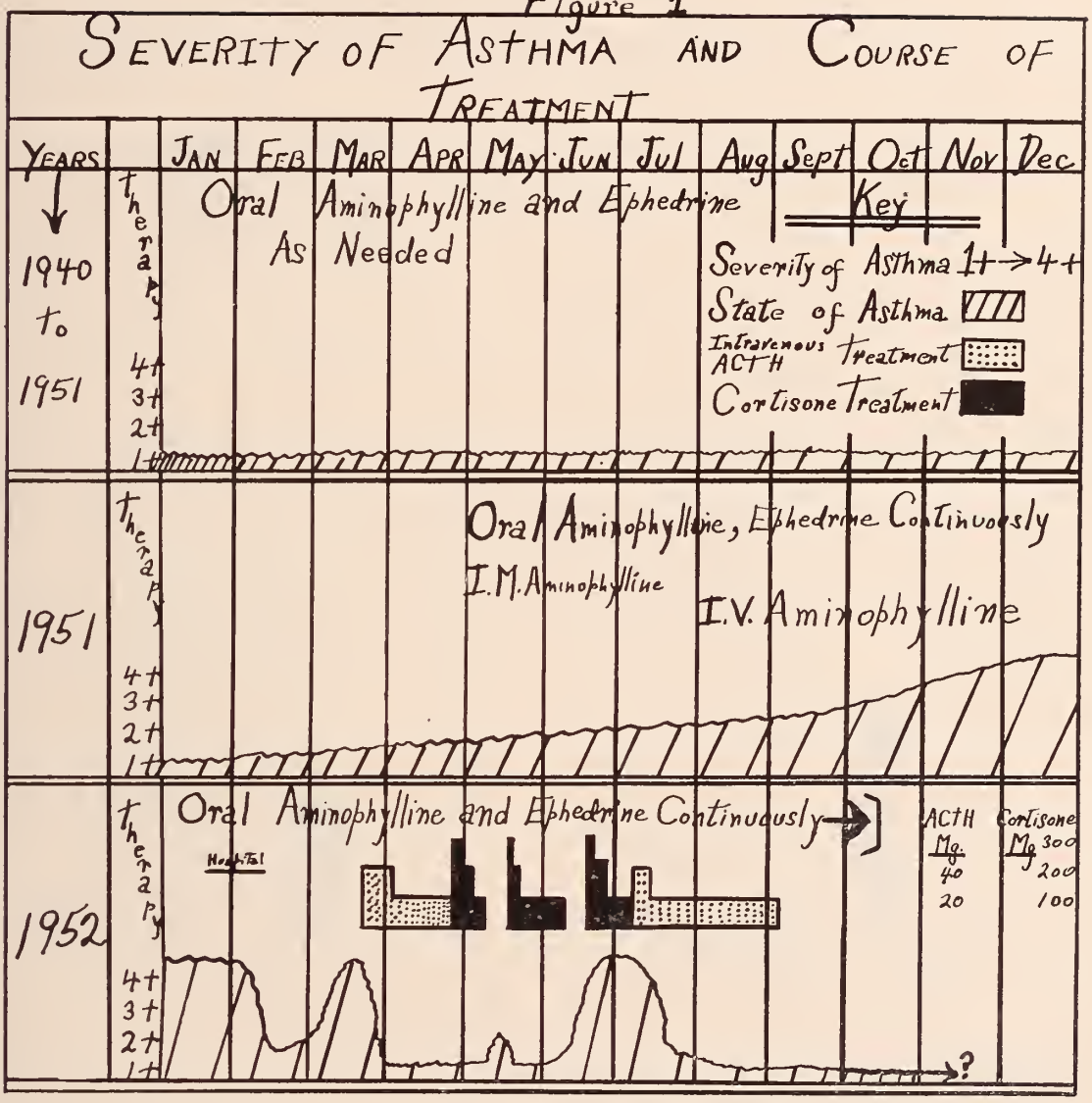
In order to decrease the cost of medical care an attempt was made to have the ACTH given intramuscularly in 20 milligram dosages. It was found that control was lost if less than three such injections were given each day. This was a more costly regimen, and so the patient's therapy was converted to oral cortisone.

Control of symptoms by cortisone was adequate only while the patient was taking a minimum of 100 milligrams daily. From April 28 until June 23, the patient had three courses of cortisone with satisfactory remission during the first two. Each time, while feeling good and because of the cost, she discontinued the medication in spite of medical advice. Each time she suffered an exacerbation within ten days. However, a third course of cortisone failed to grant remission and on June 23, the patient was again in an unremitting state of asthmatic paroxysm.

Intravenous ACTH therapy was begun again with response just as complete as was the original response to ACTH, but its attainment was somewhat delayed. This time full improvement was not attained until three treatments of 20 milligrams each were given.

During the remainder of July and into September, the patient was in remission and was ambulatory with bi-weekly treatments of intravenous ACTH. Since the guide for therapy was the patient's subjective feeling of dyspnea, treatment was administered only when the patient called for it. At these times, she was seen to be in extreme discomfort because of her asthma. However, after the treatment of September 4, the patient has required no medication, through January 1953, except an expectorant.

Figure 1



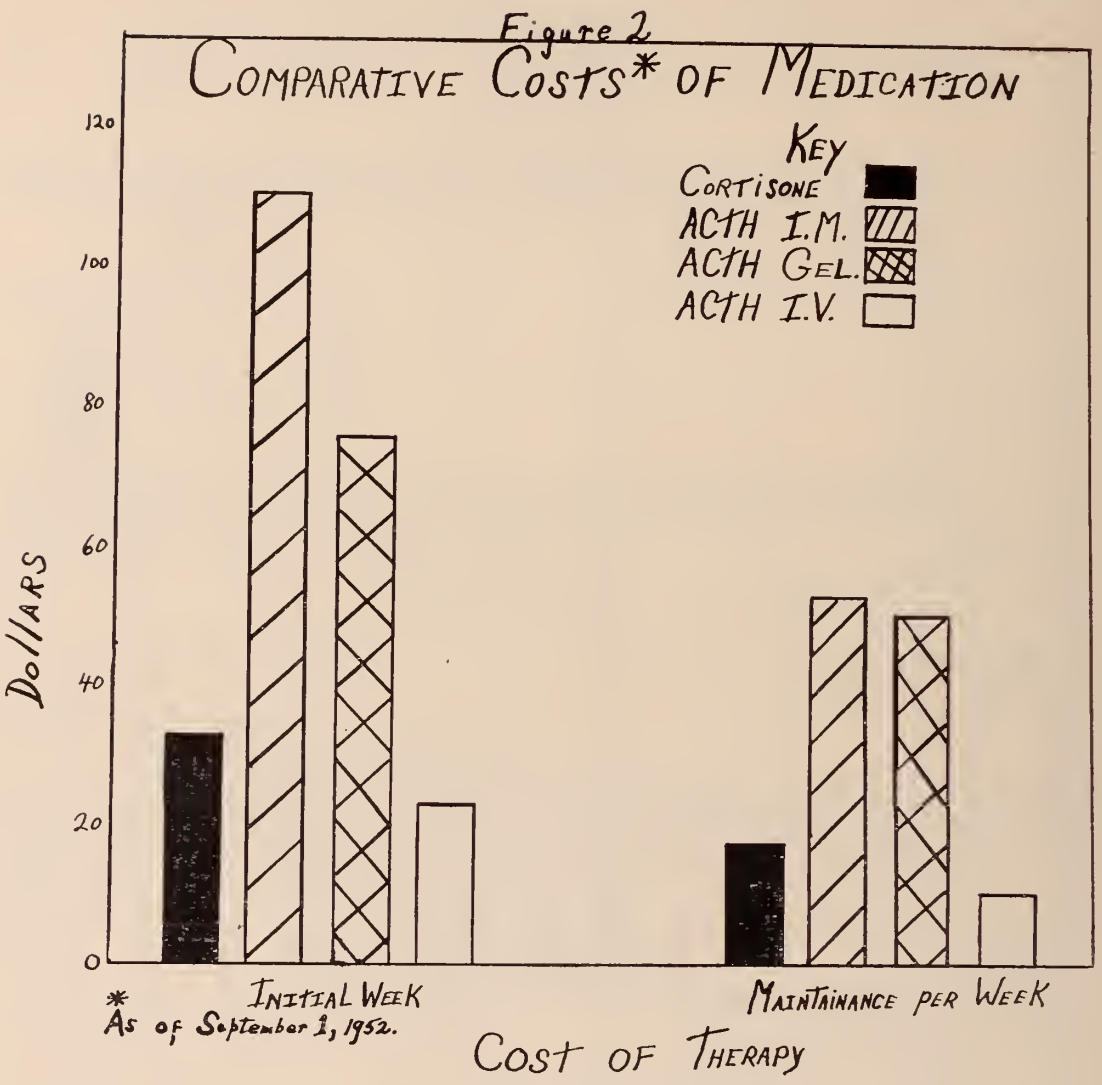
COMMENT

The literature has adequately documented the fact that ACTH and cortisone help patients in status asthmaticus.[1, 2] Moreover, there is recent evidence that these drugs can be used for months efficiently and without serious complication.[3] It should be emphasized that this maintenance therapy is indicated only in those cases of intractable status asthmaticus where nothing else can be offered and where the patient would go on to develop cor pulmonale in short order. This principle must be understood because once therapy is begun, there is a possibility that the patient may become dependent on the medicine. This phenomenon has been noted in certain cases of atopic dermatitis treated with cortisone.[6]

Presuming that ACTH or cortisone is indicated, we feel that the former is more efficacious. It has been our observation as well as that of others[3] that these cases may become resistant to cortisone and, if not resistant, are not quite as well relieved by it.

The sluggish response to ACTH after cortisone was discontinued may in part be attributed to the adrenal cortical atrophy resulting from cortisone therapy.

Since ACTH is the medication of choice, it would be desirable to determine which technic of administration is most economical.



Comparison of the costs of the various modes of giving this drug indicates that the intravenous method is least expensive (Figure 2). This latter route requires less of the material since a considerable portion of the intramuscularly injected ACTH becomes inactivated by tissue juices.[4] The ACTH gel is more efficient than the water soluble material for intramuscular injection but it costs five to six times as much and is still less economical than the intravenous method.

CONCLUSION

A case of intractable status asthmaticus was maintained in remission by serial injections of ACTH intravenously for several months, and thereafter, required no further parenteral therapy.

Comparison of the efficacies and the costs of oral cortisone, intramuscular and intravenous ACTH and ACTH gel leads to the conclusions that the intravenous route is not only most efficient, but also most economical.

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PROBLEMS OF PSYCHIATRIC HOSPITALS[1]

J. Berkeley Gordon, M.D., Marlboro, N.J.

The author enumerates practical avenues for better orienting the hospital to the community and vice versa. These include development of a corps of volunteers, making full use of visiting clergymen, promoting citizens' mental hygiene societies, and participation in the professional and civic life of the community.

"Canst thou not minister to a mind diseas'd,
Pluck from the memory a rooted sorrow,
Raze out the written troubles of the brain,
And with some sweet oblivious antidote
Cleanse the stuff'd bosom of that perilous stuff
Which weighs upon the heart?"

This pathetic plea was addressed by Macbeth to the court physician. It referred to the mental illness of the queen who was probably suffering with what we would now call reactive depression. It is a token of the challenge to all psychiatrists and mental hospitals. Although we in the field of mental health pride ourselves on our recovery rates and are encouraged by the great progress which has been made in the last twenty years, all too frequently we are compelled to confess our own helplessness in the face of overwhelming intra-psychic forces and to answer in the words of the court physician:

"Therein the patient must minister to himself."

Even to enumerate by title only the problems of mental hospitals would be an impossibility. All that one can hope to do, then, is to analyze the situation in which mental hospitals find themselves and seek to understand the underlying reasons for this plight. There is an aphorism in psychiatry that a man always does what he wants to do. Like most generalizations this statement is an oversimplification, and is subject to question; but, by and large, it is probably true. Thus, if one breaks down with heart disease, or cirrhosis of the liver, or whatnot, it is because he wanted to make money or to drink liquor to the neglect or exclusion of more healthful and hygienic pursuits. Or if one goes to the electric chair for murder, it is because he deliberately chose a course of action that led to this terminus in preference to other alternatives, knowing full well what the penalty for this choice would be. Thus in a subtle sense he "wanted" to be electrocuted.

Psychiatric hospitals are in their present plight because the people, by and large, want them that way, and the differences in the efficiency of mental hospitals in different states, their attitude and atmosphere, therapeutic policies, diets, cleanliness, degree of overcrowding, and understaffing, and their reputations in their communities are direct indications of the level of social progress of the people who own these hospitals. Hospitals are like automobiles, preparatory schools, and most other things in this world; you get what you pay for. Although this generalization too is subject to some quibble, it is certain that therapeutic efficiency, as betokened by an interested and competent medical, dental, and nursing staff with their necessary tools and equipment to operate an aggressive treatment program, costs money. To be sure one can operate an expensive psychiatric hospital without these things. It depends on whether we choose to spend our money for furniture, carpets, draperies, pictures, and other "window dressing"; or for doctors, dentists, insulin, surgical equipment, x-ray and other essential materials. If one can have both, so much the better; but it is difficult to have both without making the hospital a de luxe institution and depriving many people of their chance to get well because of economic barriers. Many mental hospitals have little of either the pleasant creature comforts or scientific programs. The mental hospital administrator knows this perhaps better than any one else. You pay your money and you take your choice. As the sign in the old frontier saloon said, "Don't shoot the poor piano player,—he's doing the best he can"!

Basically there is only one problem in psychiatric hospitals: the problem of public education. This is a heartbreaking job that pro-

1. Read at the Regional Conference of the American College of Surgeons, Atlantic City, N. J., February 11, 1952.

ceeds with glacier-like deliberation. It is a job worth doing however. The average citizen is completely indifferent to the problems, even to the existence, of psychiatric hospitals. He can take them or leave them, and most of the time he just leaves them: — until some member of his family develops a mental illness and has to be sent to a psychiatric hospital. Then he becomes articulate! The welkin rings with his righteous indignation. Something ought to be done about it, but fast! On the other hand, those of us whose lives are dedicated to the cause of mental health are occasionally saved from complete despair by the rarely precious letter or personal interview with an intelligent relative who evidences a complete and sympathetic understanding of our problems and is sincerely grateful for the care their loved ones are receiving. Oddly enough this pleasant and all too infrequent experience is by no means limited to the relatives of patients who get well. It happens with relatives of patients who die, or who must finally and regretfully be classified as therapeutic failures. The critical factor is the intelligence, objectivity, and human sympathy of the individual, not the therapeutic results. I know that this rare bird exists, because I have seen him with my own eyes. I suspect that he is more numerous than available evidence indicates. I only wish that he were more articulate, and less bashful about expressing himself.

You cannot give the public something better than they understand, appreciate, and are willing to pay for. If you do they will turn on you and destroy you. They can be led but not driven. Politicians probably discovered this truism back at the dawn of time. One could wish that more were willing and capable of leading.

How then can the progress of public education in this field be advanced, so that the average citizen will want good psychiatric hospitals, demand them, and be willing to pay for them?

Fundamentally to have good public relations and get community support one must have a scientifically sound institution. Many other shortcomings can be forgiven if it is an undeniable fact that the medical staff is competent, progressive, energetic, and ethical. In addition to work within the hospital the medical staff should take an active part in local medical society affairs and identify themselves with the medical fraternity of their area. Work on committees of the county medical society and the holding of office should be regarded as a privilege and an honor. Each county medical society should be encouraged to have at least one meeting a year devoted to a psychiatric program and such a meeting should be held whenever possible in a local psychiatric hospital with staff members as speakers, utilizing clinical material of that hospital. The medical staff should never decline an opportunity to speak at service clubs, Parent-Teachers Associations, church and fraternal organizations, organizations of social workers and similar groups. This is especially true for executive and administrative level physicians who have an exceptional opportunity to dispel popular misconceptions about psychiatry and mental hospitals and to replace such misconceptions, prejudices, and fears with authoritative information conducive to confidence and respect. Speaking in public is hard work; but these efforts pay off in a very practical manner when the hospital has been under fire from hostile groups. Then, community confidence is a life saver. Certain community physicians should be an integral part of the hospital's staff as consultants in the specialties. Physicians should be encouraged to visit the hospital to see the patients whom they have sent there. All ethical physicians should be welcomed to the hospital's staff meetings and encouraged to participate in discussions. All of this is a roundabout way of saying that the psychiatric hospital should occupy a place of respected leadership in its community and should be an active participant in local affairs, not an island unto itself.

Having started, (logically enough considering my personal bias), with the medical staff and its relationships I would commend to you next our friends in an allied profession, the clergy. These gentlemen have an exceptional opportunity to direct the thoughts and sympathies of large groups of people. They speak with the voice of authority. They can do our hospitals a lot of good if we make sure first that we deserve their help, then invite them in

with humility. There is plenty of work in every large psychiatric hospital for at least one full time resident chaplain. His work can be supplemented by a group of visiting clergymen of different faiths. They can hold devotional services, prayer meetings, song services and seasonal celebrations for patients, and give a highly specialized and consoling form of psychotherapy to bewildered and distraught human beings which may save some of them from suicide. Not every clergyman can do this, — any more than can every doctor of medicine, — but if your visiting clergyman has a stable well integrated personality himself, some capacity for objectivity, and not too much human prejudice, and if you will take the trouble to teach him a little bit, he can interpret your hospital to the community and serve as a major factor in community education through the pulpit and personal contacts. This is not a one-sided bargain by any means. Clergymen, like doctors, are also human beings. They have their conflicts, their frustrations, and their depressions, even their involutionary periods. The hospital can help them to understand themselves better, and through better self mastery to be better pastors, husbands, and fathers, and more understanding of men's frailties—*tout comprendre c'est tout pardonner.*

A full time resident chaplain who has himself been trained in a psychiatric hospital can give seminars for community clergy in mental mechanisms and mental hospital problems that are very beneficial to public education. Well planted seeds of this type are very fruitful. Of course we sometimes have to take an untrained chaplain and train him ourselves, even as we do doctors.

Another technic of public education is the Volunteer Women's Auxiliary. You have in these women naturally selected groups of civic minded citizens who have enough responsibility, love of their unfortunate fellow human beings, energy, curiosity, and leisure to want to come into mental hospitals and work with patients. Some work with the occupational therapists, some with the physical education and recreation division, some with the music therapists; others help to handle visitors, convoy groups of patients about the hospital, serve as nurses' aides or beauticians and do many different forms of work. They provide magazines, games, decorations, furniture and luxuries which are otherwise beyond the reach of many hospitals. The mere fact that a group of nice women is willing to come into a mental hospital, talk to patients and treat them as human beings is helpful to the patients' morale, improves their behavior and their language, and makes their outlook more hopeful. During the summer months we have a picnic every Wednesday afternoon in a grove by a little brook and pond. These picnics are conducted by our Women's Auxiliary who play soft ball with the patients, wade in the creek with them and provide refreshments. We invite to these picnics groups of faithful hard-working patients who do so much of the necessary work of the hospital and without whom our large state hospitals with restricted budgets could not operate. Thus one week we will take the laundry workers, another week, the mending and sewing room workers, the dairy and farm workers, the powerhouse group, and so on. This gives a little reward and zest for life in the otherwise unexciting and drab existence of chronic patients who have little to look forward to. More than that, it encourages and stimulates some of them to make the extra effort needed to get well. In this manner also one occasionally discovers through curious women auxiliary workers that some patients have repressed their psychotic material and gotten well but were so lacking in drive and ambition or so inured to institutional routine that they made no effort to call themselves to the attention of the doctors and reestablish their lives outside the hospital. The women of the auxiliary often provide a fruitful source of working placements for women patients who have no relatives to care for them. Valuable as this is, it is still not as important as the public relations aspect and the educational value of having these women working in the hospital. Many come with trepidation and apprehension, full of the traditional horror and misinformation so characteristic of the public attitude throughout the ages toward mental disease. Most of them stay on because they find that this work is interesting and reward-

ing to them in the satisfaction they derive from it. And it is not long before they are able to correct misconceptions and prejudices about mental disease in their husbands and acquaintances. With an air of superiority they can say with assurance that certain things just aren't so because they were there, and know what they are talking about. Patients are *not* beaten and brutally treated, they are *not* kept in the hospitals as semi-slaves to work without pay; they are *not* the subjects of cruel experimentation or sexual indignities; and the doctors who work in these hospitals are *not* lazy, incompetent, indifferent political appointees. Never underestimate the power of woman! When we established our Women's Auxiliary we had some concern lest these ladies might, in their well-meaning ignorance, attempt to dictate hospital policies; or through naiveté take at face value the plausible stories of paranoid patients. We have not found this to be a problem at all; our original fears were entirely unjustified. Of course, it is necessary to screen and select the workers and to give them a short indoctrination course so as to avoid such obvious pitfalls, and not allow good material to be spoiled through neglect. It matters little whether these women work as Gray Ladies of the American Red Cross, Junior Service Leaguers, American Women's Volunteer Services or lose their other identities and merge into the Women's Auxiliary of the Blank Hospital.

The establishment of county and state mental hygiene societies is a growing movement reflecting a healthy awareness of the gravity of this problem. Since more than half the hospital beds of our country are devoted to victims of mental disease, it is high time that the interested friends of this type of specialty hospital became vocal and active. If a fraction of the funds which are now devoted to public education in cancer, tuberculosis, heart disease, poliomyelitis, or diabetes were expended in behalf of mental disease we would find our burdens much lighter and our hospitals much better. Mental hygiene societies are often started and maintained by a core of ex-mental hospital patients who have recovered and relatives of patients who are still in the hospitals. Both groups have a natural desire to improve conditions in psychiatric hospitals, and their zeal is not easily dampened. They have been in the front lines of the battle themselves and they know the practical, intimate problems of psychiatric hospitals in a way that even the best administrator can never know them. They know the hope and the despair, the little joys and the frustrations of the patients. They know the employee attitudes, the little cruelties and kindnesses of day-to-day patient life and the shortages brought about by underbudgeting. These societies are, in a way, a reflection of the tremendous impetus given to psychiatry by World War II with its high rejection rate in Selective Service for psychiatric disorders and the high casualty rate in all branches of the service for psychoneurosis, psychosis, and psychosomatic disorders. As a sane objective study of this great problem of mental health in our military effort I commend to you General Cooke's extraordinary little book[2] *All But Me and Thee.*

Mental hospital personnel (both lay and professional) should be encouraged to join and work in mental hygiene societies and give the benefit of their guidance and technical knowledge to the people who run them. Mental hygiene societies make valuable advocates with the legislature and the various governmental officials who determine how public revenues are to be spent. They speak with knowledge and conviction, and they are not easily fobbed off with platitudes.

This enumerates a few technics of improving the level of public education and knowledge of this vast problem. It is truly an endless process, but a most interesting one. For the rest of our subsidiary problems, I paraphrase the words of St. Paul to Timothy and say, "The *lack* of money is the root of all evil." There is nothing the matter with our psychiatric hospitals that a few million dollars won't fix. (I mean, of course, a few million for each hospital). And I believe that the money will be

2. Cooke, Elliot D.: *All But Me and Thee: Psychiatry at the Foxhole Level.* Washington, D. C., 1946. The Infantry Journal Press. General Cooke is an Inspector-General, not a medical officer. He gives a shrewd account of the concepts of psychiatry in a military framework as seen by an alert nonphysician, and writes with much common sense about the problem of personality disorder *vs.* emotional illness as seen through his intelligent and non-doctrinaire eyes.

forthcoming if the people are given the facts and come to realize that much mental disease is curable, that the true measure of a mental hospital's efficiency is its cost per recovery, not its daily cost per capita, and that a wise investment in this form of health pays rich dividends in lives salvaged and human beings restored to productivity and normal life.

State Hospital, Marlboro, New Jersey

TO WORKERS IN THE FIELD OF STRESS AND ADAPTIVE HORMONES

The following letter, from Dr. Hans Selye, is published in the interest of all concerned with stress and adaptive hormones. If you are engaging in any such research, you can help by notifying Dr. Selye of your work and by sending him reprints of articles as they are published. His address is: Dr. Hans Selye, Institute of Experimental Medicine, Universite de Montreal, Montreal, Canada.

In perusing the current literature, we note that an increasing number of articles deal with research on "stress" and the "adaptive hormones" (ACTH, STH, corticoids, adrenergic substances, etc.). The success of research in this field largely depends upon the prompt availability and evaluation of relevant publications, a task for which we should like to solicit the assistance of your readers.

In 1950, our Institute initiated a series of reference volumes entitled "Annual Reports on Stress" (Acta Medical Publishers, Montreal) in which the entire current world literature is surveyed every year. Reprints proved to be the best source of data. Hence, in the past, we have sent out several thousand individual reprint requests to authors engaged in research on stress and allied topics. Even this did not give us the wide coverage which would be desirable, because it was impossible to contact all authors individually. It often takes too much time to get the requested reprints.

To insure prompt inclusion of publications in the annual reports, these surveys must develop into a cooperative effort between the authors and the reviewers. This cooperation was greatly enhanced of late by the publication of announcements, in several medical journals, encouraging investigators interested in stress research to send us their reprints for this purpose as soon as they become available.

We should be grateful if by the publication of this note, you would bring this problem to the attention of readers of THE JOURNAL of The Medical Society of New Jersey.

Very sincerely yours,

HANS SELYE, M.D.
ALEXANDER HORAVA, M.D.

MEDICAL WOMEN'S ASSOCIATION MEETING

The New Jersey Medical Women's Association will meet at the State Society Headquarters in Trenton on Wednesday, March 18. The meeting will start at 3:00 p.m., preceded by a luncheon at 12:30. Dr. Katherine Boucot, Professor of Medicine at the Women's Medical College of Pennsylvania, will discuss "Newer Trends in the Treatment of Pulmonary Tuberculosis."

The New Jersey Medical Women's Association is a branch of the American Medical Women's Association and has at present 100 members from this state. Formal meetings are held two or three times a year, at which time problems peculiar to the career of women in medicine are considered. Dr. Carye-Belle Henle is president for 1953.

THE TREATMENT OF RADIATION PNEUMONITIS WITH CORTISONE

SANFURD G. BLUESTEIN, M.D.,* and JACOB ROEMER, M.D.,† Paterson, N.J.

This preliminary report suggests the prompt administration of cortisone or adrenocorticotrophic hormone in cases of radiation pneumonitis.

In October 1951, Cosgriff and Kligerman[1] reported the dramatic effect of ACTH and cortisone in halting and partially reversing the acute phase of radiation pneumonitis. In that article they also summarized briefly the various factors contributing to the pleuropulmonary reaction. Since that time, one of us (S.G.B.) has had occasion to treat several cases of radiation pneumonitis with cortisone confirming the findings reported by the above authors.

The following case is reported, however, because unlike previously reported cases, it is an example of radiation pneumonitis occurring in a virgin lung which had not been affected by carcinoma, arteriosclerosis, or infection.[2] Therapy was started immediately at the outset of the reaction with complete reversal of the lungs to normal by x-ray.

CASE REPORT

The patient was a forty-five year old white female who had a radical mastectomy for carcinoma of the left breast with axillary gland involvement. Because of a nodule in the skin on the opposite side the patient had received 3400 roentgens in air tangential to the right chest and 2600 roentgens in air tangential to the left chest in addition to 1600 roentgens in air to each supra-clavicular region in sixty days. (All therapy was 200 KV, HVL 2 mm Cu).

The patient suddenly became dyspneic and developed a rasping cough which prevented her from sleeping or eating. Cortisone 100 milligrams[3] daily plus 600,000 units of penicillin were started immediately following a chest x-ray which showed infiltrations in both apices consistent with radiation pneumonitis. Within twenty-four hours, the dyspnea and cough lessened to such an extent that the patient was comfortable and was able to go about normal home activities. After one week cough and dyspnea had disappeared completely. Cortisone was maintained at the initial dose level for one week following which it was halved weekly until it was stopped at the end of three weeks. Financial considerations made higher dosage of cortisone prohibitive at that time.

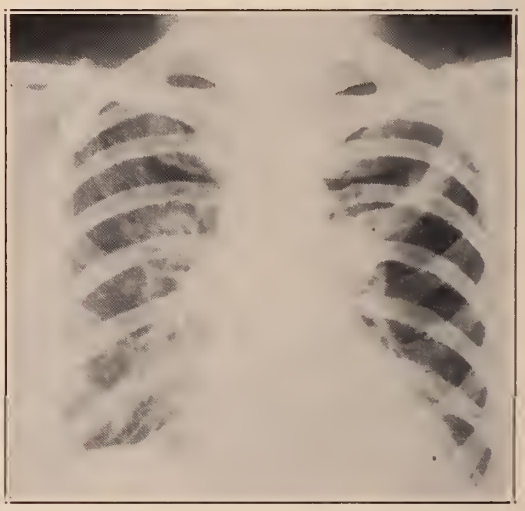


Figure 1. Radiation pneumonitis at onset of therapy.

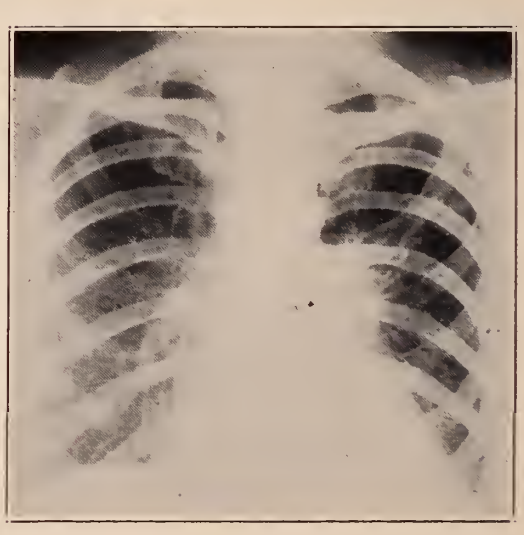


Figure 2. Left upper lobe infiltration remaining after one month of therapy.

* Adjunct Radiologist, Barnert Memorial Hospital, Paterson, N. J.
† Emeritus Radiologist, Barnert Memorial Hospital, Paterson, N. J.

Cough recurred at the end of one month and again responded to a similiar dosage schedule of cortisone. Since that time the patient has remained clinically well, and she is in good health at the present writing.

A chest film at the end of one month showed complete resolution of the infiltration on the right, but no change in the infiltration on the left. Three months following the onset of therapy, the chest film was entirely normal.

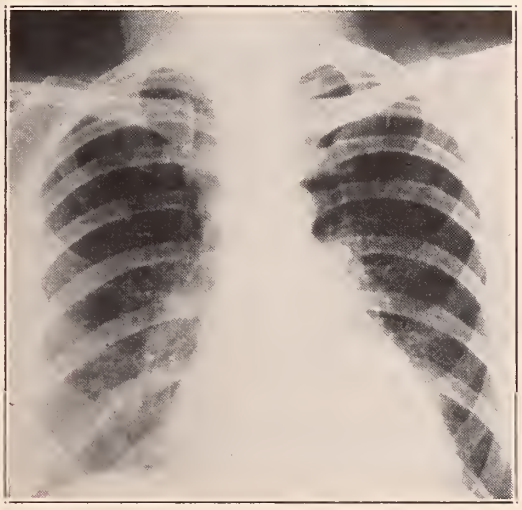


Figure 3. Complete resolution three months later.

COMMENT

The interesting features of this case are the immediate, dramatic response of the patient's symptoms to cortisone therapy, the arrest of the pleuro-pneumonitis, and the eventual complete restoration of the chest findings to normal.

Cortisone given promptly at the beginning of symptoms may prevent any permanent damage to the lung and it is therefore the treatment of choice as soon as a pulmonary reaction is recognized. Experience from this and other cases indicates that therapy should be maintained at high levels for at least four weeks, and that total treatment should be continued for at least six to eight weeks.

591 East 27 Street

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3. This dose of cortisone, which is less than the usual initial dosage, was found adequate for the relief of symptoms.

NUCLEAR STUDY COURSES

The Oak Ridge Institute of Nuclear Studies announces an advanced course in autoradiography and three basic courses in radioisotope technics specially planned for medical and biologic personnel. The autoradiography course will be held from June 15 to 25, and the basic courses, each of 4 weeks' duration, will start on June 8, July 6, and August 10. The courses will consist of lectures, laboratory demonstrations, and discussions. Further information may be obtained from the Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tennessee.

EENT SECTION MEETING

Although no regular meeting has been scheduled for 1953 at the State Convention, an informal luncheon meeting of the EENT Section will be held at 12:30 in Child's Boardwalk Restaurant, Atlantic City, on Tuesday, May 19. No reservations are necessary. All physicians interested in this specialty are invited to attend.

GOITER ASSOCIATION MEETING

The American Goiter Association will hold its 1953 meeting at the Drake Hotel, Chicago, Illinois on May 7-9. All aspects of the thyroid gland and its diseases will be discussed at this meeting. Interested physicians are invited.

PLASTIC SURGERY CONTEST

The Foundation of the American Society of Plastic and Reconstructive Surgery announces its fourth annual scholarship contest for 1953. This contest is open to residents and plastic surgeons who have been in practice less than five years. Two prizes of a six months' plastic surgical scholarship are offered. The essay should be about 5,000 words long and describe either clinical or laboratory research in plastic surgery. Manuscripts should be submitted not later than August 1. Further information may be obtained from Dr. Jacques W. Maliniac, Chairman, 30 Central Park South, New York 19, New York.

SUBACUTE BACTERIAL ENDOCARDITIS IN MIDDLE AND LATER LIFE *

WITH REPORT OF TWO CASES

HERMAN SOBOL, M.D., Newark, N. J.

Subacute bacterial endocarditis is usually considered a disease of young adolescents. The author here presents two important cases occurring in the sixth decade and emphasizes the possible confusion with suspected malignancy.

Subacute bacterial endocarditis is often not thought of in patients in the sixth and seventh decades. Libman[1] states that about two-thirds of the cases of subacute bacterial endocarditis occur in the third and fourth decades of life, and White,[2] whose book is the standard in many medical schools says that it is commonest between the ages of fifteen and thirty years. Furthermore, the symptoms of this form of endocarditis often lead the examiner toward a search for a neoplastic disease, or are explained away on the basis of degenerative vascular disease.

More recently, with the increasing use of the digitalis glycosides and the prevalence of digitalis toxicity[3] many of the symptoms of subacute bacterial endocarditis in older people, such as weakness, malaise and neurologic findings, are ascribed to digitalis toxicity.

Finally, the initial diagnosis in many of these patients is often a virus infection or pyelonephritis. Then, antibiotics may be given in inadequate doses, the underlying disease may become masked, and the life of the patient may be threatened by the development of resistant forms of the offending organism, by irreversible damage of the heart[4] or of remote organs by embolization.

CASE ONE

Case 1—A white male age 58 was first seen in my office in January, 1950. His complaints were weakness of five months' duration, post-prandial "gas pains" in the epigastrium and excessive perspiration for three weeks, especially at night.

He had enjoyed good health until six months before I saw him. At that time he felt "grippy" for several days and was told that he had a "virus infection" and was given 300,000 units of penicillin intramuscularly as well as symptomatic treatment. When his recovery seemed delayed he was seen by a cardiologist because of the presence of an enlarged heart and a murmur. There were no other abnormal findings except a secondary anemia. One negative blood culture was obtained. He was put on a regimen of iron and liver extract by mouth.

When he first came to my office, he was an anxious, apprehensive male with a lemon yellow tint to an otherwise clear skin. Though 69 inches tall, he weighed only 139 pounds. Temperature was 98; pulse was 120, regular and of good volume. Blood pressure was 198/68 on the right arm and 184/70 on the left arm. The pertinent abnormal physical findings were confined to the heart and abdomen. The heart was enlarged to the anterior axillary line on the left. A Grade III harsh mitral systolic murmur was transmitted to the axilla, and a Grade II aortic systolic murmur was transmitted to the neck. Heart sounds were of good tonal quality. The aortic second sound was louder than the pulmonic. No diastolic murmurs were heard. The chest was clear. The liver was palpable three fingers' breadths below the costal margin. It was firm, smooth and not tender. No other organs or masses were palpable. Rectal examination showed black stool on the glove but there were no masses and the prostate was normal. The femoral, posterior tibial and dorsalis pedis pulsations were adequate. There were no abnormal neurologic findings.

On fluoroscopy the enlargement of the heart was primarily that of the left ventricle although the heart as a whole seemed enlarged. The aorta was dilated and tortuous. The esophagus, outlined with barium, followed a normal course.

Red cell count was 3,580,000 with a hemoglobin of 11 Grams and a white cell count of 22,900 with 79 per cent neutrophiles, 7 per cent stab forms, and 19 per cent lymphocytes. The red cells were normocytic, and showed a central deficiency. The first morning urine showed a specific gravity of 1020. There was a trace of albumin but no sugar. Microscopic examination revealed one to three red blood cells per high-power field and numerous coarsely granular and hyaline casts. Erythrocyte sedimentation was 44 millimeters in one hour (Westergren). The electrocardiogram showed a sinus rhythm with occasional premature ventricular contractions and no evidence of myocardial damage or of conduction disturbance.

Because of the weight loss, epigastric pain, weakness, sweats and anemia, I made a provisional diagnosis of gastro-intestinal neoplasm and suggested hospitalization for further study.

On admission to the hospital, temperature was 99, the pulse was 100 and the respirations 20. He showed a progression of his anemia. Hemoglobin

* Read by invitation to the Scientific Meeting of the Newark (N. J.) Presbyterian Hospital Staff on September 4, 1951.

was now 9.2 Grams and the red cell count 2,710,000. Since his physical findings had not changed we proceeded to look for a neoplasm. Gastric analysis was normal. Blood chemistry was normal except for the total protein which was 5.5 Grams. The acid phosphatase was normal. A gastro-intestinal series was normal though the spleen as well as the liver appeared enlarged. At this point the patient was re-examined but the spleen still could not be palpated. A sternal marrow puncture showed only depression of the erythrocytic series.

On the third day after admission, his evening temperature rose to 101.6 and on the fourth day to 101. One culture was taken at 5 p. m. and another at 9 p.m. The following day four blood cultures were taken at four hourly intervals and as soon as the last culture was taken the patient was started on intramuscular aqueous penicillin 300,000 units every three hours. At the time penicillin therapy was instituted the temperature had reached 104. The first blood culture was positive for *Streptococcus viridans* 24 hours after the first dose of penicillin. All six cultures, in fact, were positive with the same organism. When sensitivity tests showed the organism extremely sensitive to penicillin the dose was changed to 400,000 units Penicillin S-R§ every six hours for a total dose of 1,600,000 units per day.

Twelve hours after the first dose of penicillin the temperature became normal and there was no subsequent significant rise during the remainder of the patient's stay in the hospital. Twenty-four hours after specific therapy was begun the patient developed petechiae of both lower extremities. One week after treatment he had marked itching and redness of the skin, thought to be a penicillin reaction. This was promptly controlled by 50 milligrams of Pyribenzamine† twice daily. At the end of two weeks of treatment, the blood picture had not improved on liver and iron by mouth. He then received 250 cubic centimeters of whole blood by indirect transfusion on successive days. Sixteen days later, a short aortic diastolic murmur was heard for the first time. It was the only change in murmur noted throughout the course of his illness. At the end of the second and third weeks of treatment, blood cultures were negative. Treatment was continued for four weeks. At no time was there any sign of cardiac failure. At the end of treatment with penicillin the blood count showed 12.2 Grams of hemoglobin and 3,690,000 red cells. The urine which previously had shown albumin, red blood cells and a variety of casts was now normal.

The patient was discharged five weeks after admission, considered cured of the bacterial phase of subacute bacterial endocarditis.

He has been followed carefully for the past twenty-five months and is at present asymptomatic and travels to his work in New York daily. His blood picture is normal and there have been no sequelae in the cardio-renal system.

This patient presented many features commonly seen in neoplastic disease: weakness, sweats, weight loss, elevation of temperature, increased sedimentation rate and anemia. All blood cultures taken before therapy was started were positive regardless of the height of temperature or time of day taken.

The only change in murmur heard, sixteen days after treatment was instituted, corresponded to the stage of healing of a vegetation rather than destruction of a valve cusp which commonly occurs in the untreated case.

Failure to obtain a positive blood culture on this patient's first admission to the hospital was probably due to the one dose of penicillin previously given, since the organism was extremely sensitive to penicillin.

The symptomatic improvement of the patient after 24 hours of treatment was dramatic.

CASE TWO

A white female age 60, was first seen in my office in August, 1951. She complained of numbness of the left side of the face of three weeks' duration, difficulty in talking (which she described as difficulty in getting the words out) marked weakness and night sweats.

She had been ailing since April, 1951, when she developed vague pains in the abdomen, attributed to an inguinal hernia. At about the same time she experienced blurring of vision and a feeling of a heavy weight on the top of her head. Three weeks before I saw her she had an attack of severe epigastric pain, left lower chest pain anteriorly, and shortness of breath. This was diagnosed as gallbladder disease, and she was placed on a low fat diet. She thereafter lost appetite and became increasingly weaker. Her night sweats became more profuse and she felt "all in" when she presented herself for examination.

She had had migrating joint pains and high fever at the age of fourteen. The patient was then perfectly well until three years ago when she developed palpitations and a rapid heart rate. This was probably the onset of auricular fibrillation. She then first received digitalis and thereafter took more or less of it as she herself felt the need.

In the past month, she had developed marked anorexia, a weight loss of fifteen pounds, and nocturia, having to void three to four times a night. One brother has rheumatic heart disease and another brother died suddenly at the age of 42 of coronary thrombosis.

Her temperature was 98, the pulse grossly irregular, the rate 84 with fairly good volume. She was well developed and fairly well nourished. Her speech was slow, deliberate and hesitating. The left face showed the weakness which is a common sequel of a cerebral vascular accident. She did not appear acutely ill, there was no obvious respiratory distress, nor were there any visible skin lesions.

† Pyribenzamine is a trade-name. It is registered by Ciba Pharmaceuticals and identifiies their brand of tripelennamine hydrochloride.

§ Penicillin S-R is Parke, Davis and Company's trade-name for a combination of procaine and crystalline sodium penicillin—G's.

The pertinent physical findings aside from the left facial weakness and a right inguinal hernia, were limited to the heart. The heart was markedly enlarged. The left border was in the midaxillary line. The sounds were of good tonal quality, the pulmonic second sound was loud and greater than the aortic second sound. At the apex there was a harsh mitral systolic murmur transmitted to the axilla and around to the back. In addition, there was a low diastolic rumble characteristic of mitral stenosis. The rhythm was irregular, the rate between 84 and 100 with no pulse deficit. Chest was clear.

No organs were palpable in the abdomen, nor was any tenderness elicited. There was slight tenderness over both costo-vertebral angles.

On fluoroscopy the heart was generally enlarged in the P-A view and showed prominence of both the pulmonary segment and lower third of the left cardiac shadow.

The esophagus, outlined with barium, was displaced backward in the R.A.O. position by a large left auricle. Outside of prominent hilar markings the lung fields were clear.

Examination of the blood revealed 13.5 Grams of hemoglobin and 4,050,000 erythrocytes. Leucocyte count was 12,600 with 76 per cent polymorphonuclear leucocytes of which 73 were segmented and 3 were stab forms and 24 lymphocytes. Sedimentation was 83 millimeters for one hour (Westergren).

A urine specimen passed in the office showed 4 plus albumin and microscopically revealed numerous leucocytes with pus clumps.

The electrocardiogram showed auricular fibrillation and a premature ventricular contraction which I interpreted as a sign of digitalis toxicity.[5]

From the findings I made a provisional diagnosis of (1) Rheumatic heart disease with mitral stenosis and insufficiency; (2) Cerbral vascular accident, embolic from the left auricle; (3) Digitalis toxicity; and (4) Pyelonephritis. A diagnosis of subacute bacterial endocarditis did not occur to me at that time.

On the third day of admission, August 13, 1951, she began to show a low grade fever. There seemed to be nothing to account for it on physical examination and it was felt that the urinary tract infection might be responsible. But when the temperature remained elevated for three days I was faced with a triad of:

(1) rheumatic valvular heart disease with a murmur; (2) a cerebral vascular episode which could have been embolic, and (3) fever. These findings together with marked weakness and sweats prompted the taking of blood cultures before antibiotics were considered.

Because of previous successes in obtaining positive blood cultures at 4 hourly intervals, seven cultures were taken over a 27 hour period. Immediately following the taking of the last blood culture, 400,000 units of penicillin were given intramuscularly and continued every four hours thereafter for a total dose of 2,400,000 units a day.

Within the next 24 hours, she showed marked symptomatic improvement. Positive cultures were obtained for *Streptococcus viridans*. Reports on sensitivity to antibiotics showed only mild inhibition by penicillin but marked sensitivity to streptomycin, aureomycin and terramycin. This report prompted me to stop the penicillin and replace it with streptomycin and terramycin. The latter I felt would be more effective in getting at the urinary tract infection as well.

After several days without penicillin, she began to go downgrade clinically; she was losing weight and did not have the sense of well being that she enjoyed on penicillin. Accordingly I decided to resume the penicillin and give the streptomycin as Combiotic‡ alternating it with 800,000 units of penicillin while still continuing the terramycin. In 24 hours, she received 2,400,000 units of penicillin, 2 Grams of streptomycin and 1.5 Grams of terramycin. Within 48 hours after this was started she again enjoyed a sense of well being, showed continued improvement and the temperature remained flat.

On the 30th day of treatment, the patient complained of being "seasick" and showed signs of labyrinthitis. All antibiotics were therefore, discontinued.

Aside from the specific therapy, small blood transfusions were given as needed, also parenteral vitamins. Digitalis was used to control the rapid ventricular rate when it occurred. Auricular fibrillation continued throughout her course of treatment.

Negative blood cultures were obtained on the 11th and 28th days of therapy.

The patient was discharged on the 43d day after admission considered cured of the bacterial phase of subacute bacterial endocarditis.

Since her discharge, six months ago, she has remained normal and there has been no change in her murmurs. Auricular fibrillation continues well controlled by digitalis and the heart appears slightly smaller. She has gained 19 pounds in weight. The urine shows only a trace of albumin, all other urinary abnormalities having completely disappeared.

In this patient again, the diagnosis of subacute bacterial endocarditis was delayed because the symptoms were suggestive of disease entities more common in this age group: gallbladder disease, cerebral vascular accident, embolism from a left auricular thrombus, pyelonephritis and digitalis toxicity. The weakness, anorexia, abdominal pain and sweats could suggest a gastro-intestinal neoplasm as well.

Auricular fibrillation should not eliminate the possibility of subacute bacterial endocarditis since this arrhythmia as well as other cardiac arrhythmias are a good deal more frequent than commonly supposed with subacute bacterial endocarditis.[6]

All blood cultures taken before specific

‡ Combiotic is a trade-name. It is the designation registered by Chas. Pfizer and Company for a penicillin-streptomycin combination.

therapy were again positive, regardless of the time of day or night taken, or the height of the temperature.

The *in vitro* resistance of the infecting organism was no indication of how it would respond to penicillin *in vivo*.

These cases are representative of the presenting symptoms and physical findings which may confront the general practitioner, the internist and indeed even the surgeon, in patients past middle age. The infrequency with which the laboratory is consulted for blood cultures can be explained by the fact that the text books and the literature on subacute bacterial endocarditis, at least before the last decade, convey the impression that it is predominantly a disease of the younger age groups. Subacute bacterial endocarditis is superimposed only on a valve previously damaged by disease, more rarely on a congenitally defective valve. A review of the literature to determine the frequency of valvular heart disease in elderly people makes one more aware of the fertile field for development of the disease in this age group.

In 406 consecutive autopsies in patients 50 years old or more,[7] there was evidence of gross valvular damage in 234 hearts, that is, in more than half the cases. This large group of people then, can be considered to have the proper soil if given a transient bacteremia by tooth extraction, operative procedure, genito-urinary manipulation, pneumonias and a variety of other infections. They are easy prey to valvular infection.

Correll *et al.*[8] reporting on 70 cases of bacterial endocarditis lists 20 of them over 50 years of age, and 33 over 40 years of age.

Subacute bacterial endocarditis in the older age groups offers a challenge in diagnosis and treatment. The greatest aid to diagnosis is awareness of its prevalence and the fact that it can closely simulate neoplasm and other diseases in the geriatric group, as is reflected in these cases.

Treatment should begin as early as possible after blood cultures have been taken. It is not necessary to wait for the temperature to reach its height, nor is any particular time of day more likely to yield a positive culture. All blood cultures were positive in the two cases presented and treatment was instituted 27 hours after the first blood for culture was drawn. In the cases of subacute bacterial endocarditis reported by Clawson,[9] 67 per cent showed positive blood cultures for *Streptococcus viridans*. Since this organism is universally sensitive to penicillin, it should be the drug of choice in adequate dosage at the start of treatment. Early treatment may prevent irreversible damage to the brain as a result of embolization.

Age is unrelated to the eventual outcome of the disease, or to the course of the underlying heart disease.[10]

Subacute bacterial endocarditis is often responsible for pulling the trigger of the pathologic process which kills the patient, in spite of adequate treatment and a cure of the bacterial phase.

SUMMARY

1. Subacute bacterial endocarditis is often overlooked in elderly people because it shows symptoms suggestive of neoplastic disease, virus infections, pyelonephritis and degenerative vascular disease.

2. It is more prevalent in the older age groups than is generally suspected.

3. Two cases are presented, with positive blood cultures, both cured of the bacterial phase. One patient is well and asymptomatic 25 months after discharge from the hospital, the other 6 months after discharge.

205 Roseville Avenue

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STATE ACTIVITIES

TRUSTEES' MEETINGS

NOVEMBER 2, 1952

A special meeting of the Board of Trustees was held on Sunday, November 2, 1952, at the Executive Offices, Trenton. The meeting was called to discuss the Society's position with reference to possible legislation affecting the licensing of chiropractors in New Jersey. A motion was unanimously adopted to permit the addition of items of new business to the agenda. The following is a summary of the principal actions taken by the Board at this meeting:

The position of the Society concerning fee schedules and the Veterans Administration was reemphasized by the unanimous adoption of a motion to reaffirm the following resolution adopted by the Board of Trustees in 1946:

> Although we disapprove in principle the establishment of fixed schedules controlling the fees for any type of group medical care, we realize the absolute necessity of some coordinated plan for the payment of medical services to veterans; and we therefore recommend that an agreement for the payment for such services be negotiated with the Veterans Administration—said agreement to be state-wide in application, the fees to be in line with those prevailing in the more populous areas for the care of persons included in the middle income group who usually engage semi-private accommodations.

Dr. David B. Allman was authorized to represent the State Society at the 49th Annual Congress on Medical Education and Licensure, to be held in Chicago, February 8-10, 1953.

A motion that the President be empowered to appoint a Medical-Surgical Plan Liaison Committee, to consist of the chairmen of county advisory committees and such ranking officers as he may designate, was unanimously adopted.

Dr. Murray and Dr. Blaisdell reported to the Board on the conferences with Commissioner Bergsma and representatives of the chiropractors which they had attended as members of the Governor's special committee to study the licensing of chiropractors. After full discussion as to what position the Society should take with regard to chiropractic legislation at the forthcoming legislative session, the trustees unanimously reaffirmed their action of October 5, 1952, "That The Medical Society of New Jersey adhere to its insistence upon maintenance of standards for all branches of the healing arts and that the requirements for admission to practice chiropractic be made to conform with these requirements."

In accordance with the action of the Board of Trustees on October 5, 1952, approving the recommendation of the Annual Meeting Committee that the whole matter of scientific sections and their meetings be studied by a special committee. Dr. Sharp, Chairman of the Board, announced appointment of the following committee for the purpose of the recommendation: Dr. Luke A. Mulligan, chairman; Dr. Elton W. Lance, Dr. Albert B. Kump.

JANUARY 4, 1953

A regular meeting of the Board of Trustees was held on Sunday, January 4, 1953, at the Executive Offices, Trenton. The following is a summary of the principal actions taken by the Board at this meeting:

Dr. Blaisdell reported on the conferences to study the licensing of chiropractors, sponsored by Governor Driscoll and attended by representatives of the Society of New Jersey Chiropractors, State Board of Medical Examiners, and our Society. He stated that the above named chiropractic society has drawn up a bill which is designed (1) to license qualified chiropractors, yet (2) stay within the present Medical Practice Act, and (3) meet the objections in the Governor's veto message of last year. Under the terms of this bill there will be no separate board of chiropractic examiners, but chiropractors will continue to be eligible for licensure under the provisions of the Medical Practice Act and under the jurisdiction of the State Board of Medical Examiners. Having reviewed the bill thoroughly and after extended discussion, the trustees unanimously approved the deliberations of the special committee and recorded that they will not oppose such a bill, within the confines of the report submitted. The Board further authorized the special committee to make such minor changes as are necessary in the phraseology of the proposed bill.

Dr. Harrold A. Murray was authorized to attend the Golden Jubilee of the optometrists, and the National Conference of Social Agencies in Cleveland.

In response to a letter of inquiry from Dr. J. Lawrence Evans, Jr., Chairman of the Publication Committee, the trustees unanimously reaffirmed the Society's position that adver-

tisements for liquors and for contraceptive devices be not accepted for publication in THE JOURNAL.

Approval was given to a motion granting $5,000 from surplus funds to Medical Service Administration to defray part of the current expenses of Medical Service Administration, supplementing the income now received from the City of Newark for the administration of the Newark Plan. This grant was made in response to a request from the board of governors of Medical Service Administration.

The Board authorized the expenditure of $1,000 from surplus funds for a dinner to commemorate the enrollment of the one millionth subscriber under the Medical-Surgical Plan.

In accordance with the action of the Board at the preceding meeting authorizing the establishment of a liaison committee with Medical-Surgical Plan, President Murray announced the appointment of the six officers of the State Society and the chairmen of the county advisory committees on Medical-Surgical Plan to this committee of liaison.

The resignation of Dr. Gerald I. Cetrulo as New Jersey State Chairman of the American Medical Education Foundation was reported to the Board. The Board concurred in the suggestion of President Murray that Dr. Francis M. Clarke of New Brunswick, Chairman of the Society's Medical Education Committee, be appointed to succeed Dr. Cetrulo.

In conjuction with the report of Dr. Elton W. Lance, Chairman of the Welfare Committee, the Board approved the following recommendations with reference to the business of the subcommittees:

A. *Legislation*

1. That, on advice of legislative counsel, in the forthcoming session of the Legislature The Medical Society of New Jersey concern itself exclusively with such proposed legislation as affects the licensing of chiropractors until its position has had effective recognition from the Legislature.

2. That, in consequence of the technical difficulties involved in the preparation and presentation of sound legislation, and upon the advice of legislative counsel, all committees and agencies of The Medical Society of New Jersey wishing to present legislation for enactment, hereafter formally notify the subcommittee of that intent and supply it with the necessary information and material at least six months, and preferably nine months, in advance of the official beginning of the next legislative year.

3. That the Society reaffirm its insistence on the maintenance of the Medical Practice Act, but that such a position does not preclude consideration of amendments which would facilitate the licensing of chiropractors who have met statutory educational standards.

B. *Medical Practice*

1. That The Medical Society of New Jersey reiterates the principles of hospital administration and staff relations as adopted by the House of Delegates in 1940, and further recommends to hospitals the establishment of a liaison committee between administration and staff.

2. That The Medical Society of New Jersey adopt the statement regarding essentials of medical-nursing services in industry.

3. That the Medical Society reiterate the 1949 resolution adopted by the House of Delegates, in which it recommends that "as a matter of policy all general hospitals receiving monies from public and welfare funds in New Jersey establish General Practice Staffs," and that copies again be sent to all general hospitals in the state.

4. That the following suggestion, "that since hospital beds are practically unavailable, the Medical-Surgical Plan pay physicians for work done in their own offices in diagnosis and treatment of ambulatory patients, many of whom now crowd the hospitals unnecessarily," be referred to the first session of the House of Delegates next May, at which time there will be an open meeting for discussion of the Medical-Surgical Plan.

C. *Public Health*

1. That the Society request the New Jersey Hospital Association to approve this proposal —"that routine x-ray chest examination of hospital admissions and frequent x-ray examination of hospital personnel are desirable as routine procedure."

2. That a representative of the State Society be sent to the A.M.A. meetings of the Council on Rural Health, and that if someone has not already been designated, Dr. G. Frederick Moench be sent as representative from the Public Health Committee to the next such meeting.

D. *Public Relations*

1. Concerning the recommendation of the subcommittee that approval be given to a proposal to publish a guide booklet for members, the Board of Trustees approved in principle the recommendation, to be considered as a possible project for future indoctrination in public relations.

The report of the A.M.A. delegates, presented by Dr. William F. Costello, chairman of the delegation, was unanimously approved.

In response to a notification from the State Board of Medical Examiners that the terms of four members will expire on January 20, 1953, and requesting immediate nominations to fill the offices, the trustees authorized that the following nominations be sent to the Governor:

A. For the office now held by Dr. David B. Allman, with nominations listed in the order of preference—David B. Allman, M. D., Atlantic City; Vincent P. Butler, M.D., Jersey City; William F. Costello, M.D., Dover.

B. For the office now held by Dr. Royal A. Schaaf, with nominations listed in the order of preference—Royal A. Schaaf, M.D., Newark; Albert B. Kump, M.D., Bridgeton; L. Samuel Sica, M.D., Trenton.

C. For the office now held by Dr. Patrick H. Corrigan, with nominations listed in the order of preference—Patrick H. Corrigan, M.D., Trenton; David W. Green, M.D., Salem; Elton W. Lance, M.D., Rahway.

D. For the office now held by Dr. John H. Rowland, with nominations listed in the order of preference—John H. Rowland, M.D., New Brunswick; J. Lawrence Evans, M.D., Woodcliff; Sigurd W. Johnsen, M.D., Passaic.

In response to the trustees' request to the Medical Practice Committee to study the matter of classified telephone listing, Dr. Lewis C. Fritts, Chairman, reported that inasmuch as the State Society has never recognized any listing of specialists and until what constitutes a specialist is settled by the Board of Trustees or House of Delegates, the Medical Practice Committee does not recommend the listing of specialists as such in the classified telephone directory. The committee does make the following recommendations:

(1) That physicians' names, addresses, and telephone numbers be listed in the classified section and that general practitioners who so desire be identified with an asterisk to indicate that they are available for making house and emergency calls.

(2) That physicians' office hours be also listed if desired by the individual physician.

The Board approved these recommendations, which reaffirm the action of the House of Delegates.

Approval was given to the sale of the 1953 Membership Directory at a price of $2.50 to non-dues-paying members, and at a price of $5.00 to all others.

The Board authorized the expenditure of approximately $8,000 from surplus funds to pay for 6,000 membership plaques being prepared under the direction of the Subcommittee on Public Relations, for distribution to all members in good standing.

Upon report by Dr. Vincent P. Butler, Chairman of the Special Committee on the Medical-Dental School, that the program of the committee is at a point where it needs professional public relations service, the Board alloted $5,000 from surplus funds to the committee for a public relations promotion program in conjunction with its work.

Dr. David B. Allman reported that the Attorney General had requested that a news release be issued by The Medical Society of New Jersey to inform the public as to why graduates of some foreign medical schools or colleges are not eligible for license to practice in New Jersey. The Board approved a motion that the Executive Officer prepare such release, on the basis of information supplied by the State Board of Medical Examiners, and with the approval of the Attorney General, release it.

NEW JERSEY NEUROPSYCHIATRIC ASSOCIATION OFFICERS

At a meeting held in Newark on December 17, 1952, the New Jersey Neuropsychiatric Association elected the following officers for the current year:

President—Archie Crandell, M.D., Greystone Park.

President-Elect—Frank P. Pignataro, M.D., Red Bank.

Secretary—J. Lawrence Evans, Jr., M.D., Englewood.

Treasurer—Evelyn P. Ivey, M.D., Morristown.

EASTER SEAL CAMPAIGN

The New Jersey Society for Crippled Children and Adults announces that it will conduct its annual Easter Seal Campaign from March 5 to April 5. This Society provides rehabilitation service for every type of crippling condition, including cerebral palsy, epilepsy, and paralysis. Of the funds collected 92% are spent in New Jersey and the remainder goes for the support of the National Society. In view of the large number of children and adults with orthopedic disabilities and those with speech and convulsion disorders, this Society deserves the active support of every physician in this state.

CANCER DIAGNOSIS SYMPOSIA

The Advisory Committee on Cancer Control of The Medical Society of New Jersey has arranged a series of symposia designed for the general practitioner concerning early diagnosis of cancer. The purpose of the meetings is to brief the general practitioner in the application of office methods to detect the earliest phases of cancer. Practical talks, methods of taking cytologic smears, and of doing speculum and proctoscopic examinations will be presented by authorities in the field.

If the medical profession is to retain its prerogatives in the diagnosis of cancer, it will be on the basis that the general practitioner's office is the cancer detection clinic and that the general practitioner is equipped and qualified to make these examinations.

THURSDAY, MARCH 26

Hotel Traymore, Atlantic City

MORNING SESSION

Presiding: Robert A. Bradley, M.D.

9:00- 9:30—Introduction and Arrangements.
9:30-10:20—Laboratory Aids in Early Diagnosis of Cancer, William G. Bernhard, M.D., Pathologist, Hospital of St. Barnabas, Newark.
10:20-11:10—Industrial Carcinogens, Miriam Sachs, Chief, Bureau on Adult and Industrial Health, New Jersey Department of Health.
11:10-12:00—Cancer Is No Longer a One Man Job, William H. Kraemer, M.D., Director, Tumor Clinic, Jefferson Medical College, Philadelphia.
12:00- 1:15—Recess for Luncheon.

AFTERNOON SESSION

Presiding: Harry Subin, M.D.

1:15- 2:05—Cancer of the Respiratory Tract, John Y. Templeton, M.D., Associate in Surgery, Jefferson Medical College, Philadelphia.
2:05- 2:55—Cancer of the Gastrointestinal Tract, Thomas A. Johnson, M.D., Graduate School, University of Pennsylvania, Philadelphia.
2:55- 3:45—Cancer of the Genitourinary Tract, Charles A. Uhle, M.D., Professor of Genitourinary Diseases, Graduate School, University of Pennsylvania, Philadelphia.
3:45- 4:35—Cancer of the Breast, John C. Howell, M.D., Surgeon, Graduate School, University of Pennsylvania, Philadelphia.

WEDNESDAY, APRIL 1

Monmouth Memorial Hospital, Long Branch

MORNING SESSION

9:00- 9:30—Registration.
9:30- 9:40—Introductory Remarks by the Meeting Chairman, Daniel F. Featherson, M.D., Asbury Park.
9:40-10:20—The Physical Survey in Early Diagnosis, Otto R. Holters, M.D., Chief, Tumor Clinic, Monmouth Memorial Hospital, Long Branch.
10:20-11:00—Laboratory Aids—Cytology and Biopsy, Arturo R. Casilli, M.D., Attending Pathologist and Bacteriologist, Elizabeth General Hospital, Elizabeth.
11:00-11:50—Industrial and Environmental Carcinogens, Miriam Sachs, M.D., Chief, Bureau on Adult and Industrial Health, New Jersey State Department of Health.
12:00- 1:30—Recess for Lunch—Hospital Coffee Shop or Cafeteria.

AFTERNOON SESSION

1:30- 2:20—Cancer of the Respiratory Tract, Herbert C. Maier, M.D., Columbia-Presbyterian Medical Center, New York City.
2:20- 3:10—Cancer of the Gastro-Intestinal Tract, Milton R. Porter, M.D., Columbia-Presbyterian Medical Center, New York City.
3:10- 3:20—Intermission.
3:20- 4:10—Cancer of the Genito-Urinary Tract, Perry Hudson, M.D., Columbia-Presbyterian Medical Center, New York City.
4:10- 5:00—Cancer of the Breast, Cushman D. Haagensen, Columbia - Presbyterian Medical Center, New York City.

Medical-Surgical Plan of New Jersey

"New Jersey's Blue Shield Plan"

Dear Doctor:

As you may already have learned from press reports, Medical-Surgical Plan of New Jersey has now reached—and passed—the enrollment mark of 1,000,000 persons. This is a notable achievement, for which we have chiefly to thank our co-workers in Hospital Service Plan, (the "Blue Cross Plan" of New Jersey) who have served as our enrollment representatives ever since the Plan was first organized in 1942.

Recognition must also be made of the memorable services of the late Dr. Norman M. Scott, under whose leadership the present Subscription Contract was developed.

With the passage of recent years, and the remarkable growth in Plan enrollment, certain desirable changes in our Contract and certain opportunities for improvement and expansion of Plan benefits have become apparent. Accordingly, the Trustees of the Plan have been conducting a study of possible Contract revisions, and we hope to be able to make a definite report on these matters at an early date.

A Practical Suggestion

I should like to bring to your attention a suggestion which—if all physicians would follow it—would contribute very greatly to the smooth and efficient operation of the Plan. Its use would also frequently avoid misunderstanding and difficulty for you in dealing with patients enrolled in the Medical-Surgical Plan.

Throughout the State more than one person in every five is now enrolled in the Plan. This means that in many industrial areas, where Plan enrollment is particularly heavy, the ratio of Plan members may run considerably higher.

My suggestion, therefore, is that you, or your secretary, adopt a practice of asking each patient the question: "Are you enrolled in Medical-Surgical Plan?" or "Are you enrolled in Blue Shield?" If the answer is "yes," ask the patient to show you his Identification Card (a sample of this card is shown on Page D-3 of your "Participating Physician's Manual"). You can verify with the Plan the current standing of the Subscriber.

The full correct name of the Subscriber and the all-important Contract Number should then be copied on the patient's permanent record card in your office. At the same time, it is well to ask your patient (if a member of Medical-Surgical Plan) to complete Part I of a Service Report, provided, of course, that services eligible for Plan payment are to be rendered in the particular case. This will not only give you and the Plan the necessary information regarding the patient and his employer, but it also enables the patient to indicate whether the income of the Subscriber is such as to entitle him to "service benefits" on the part of the Participating Physician.

On behalf of the Trustees, I take this opportunity to thank all our Participating Physicians for the fine cooperation they have given the Plan.

Sincerely yours,

Royal A. Schaaf M.D.

ROYAL A. SCHAAF, M.D., President
Medical-Surgical Plan of New Jersey

NEW JERSEY STATE DEPARTMENT OF HEALTH
PUBLIC HEALTH NEWS FOR THE PHYSICIAN

Council for Local Health Services Meeting

The Annual Meeting of the Council for Local Public Health Services has been scheduled at the Hotel Strand, Pennsylvania Avenue and the Boardwalk, Atlantic City, for Wednesday, May 6, 1953.

The preliminary program includes: Registration, 10:30 a.m.; Business Meeting, 11:00 a.m.; Luncheon, 12:30 p.m. The afternoon program, which will spotlight progress made in the organization and activities of health councils in several counties, is scheduled for 2:00 p.m. with adjournment at 3:30 p.m.

The Council for Local Public Health Services is a voluntary organization of individuals and groups interested in improving local health services. Membership is open to all interested and all are invited to attend the Annual Meeting. The Medical Society of New Jersey is an organization member of the Council. For further information write to the President, Mrs. Francis Mancusi-Ungaro, 156 Mt. Prospect Avenue, Newark 4, N. J.

Veneral Disease Control Seminar

A Venereal Disease Control Seminar for the New England and Mid-Atlantic States will be conducted at Haddon Hall Hotel, Atlantic City, New Jersey, April 1-2, 1953, under the sponsorship of the U.S. Public Health Service.

The preliminary program includes the following topics: rapid epidemiology for gonorrhea; diagnostic and treatment problems in patients with low titered blood tests for syphilis; and mutual military and civilian venereal disease control problems.

All interested physicians are invited to attend the seminar, particularly venereal disease clinic physicians. Other control groups invited to the conference include local health officers, public health nurses, interviewer-investigators and military venereal disease control officers.

Change in Cerebral Palsy Clinic Procedure

Dr. Winthrop Phelps, Director of the Cerebral Palsy Program for the Crippled Children Commission, State Department of Health, is no longer able to come to New Jersey as frequently as before in order to attend State Diagnostic Cerebral Palsy Clinics. He has therefore urged that he be regarded in a consultant capacity, and see those children only which have been previously screened and diagnosed in a state or non-state sponsored cerebral palsy clinic, and who have been referred to him by the physician of such a clinic for further consultation.

On this basis, the Crippled Children Commission has set up special consultation clinics for Dr. Phelps to be held at scheduled times during the year in each of the four State Health Districts. If the clinic lists are unfilled with cases referred for consultation from state or non-state cerebral palsy clinics, it will be possible for physicians to refer their cases to Dr. Phelps directly as has been possible heretofore.

COUNTY SOCIETY REPORTS

ATLANTIC COUNTY

Leonard B. Erber, M.D., Reporter

A regular monthly meeting of the *Medical Society of Atlantic County* was held at the Traymore Hotel, January 9, 1953, DR. R. D. HARLEY presiding.

DR. ANDRE COURNAND, Professor of Medicine, Columbia University Medical School, was the guest speaker. His subject "Discussion of a Hemodynamic Concept of Cardiac Failure" was presented in an able and brilliant manner.

The Secretary read to the society a memorandum from the State Society in reference to an amendment to the Constitution, in particular reference to Article VI, final action on which will be taken by the 1953 House of Delegates. The details of the proposed amendment will appear in the Bulletin.

An amendment to the existing medical plan for physicians' fees in Child Welfare cases, dealing with an adjusted increase, was presented to the Society and approved.

Dr. Harley announced the appointment of a Telephone Committee consisting of DRS. JOY, SASSEEN and WEINER. The President stated that this committee is part of a program designed to stimulate interest and attendance at Society meetings.

DR. ALLMAN discussed some of the legislative problems that are currently confronting the medical profession. He spoke in particular of the impending chiropractic legislation, and stated that some compromise type of bill will have to be presented for the Governor's approval. He further stated that probably a bill will be drafted which will recognize and give chiropractors a license under certain circumstances. He added that the present proposed act would not change their status on the State Board, but would allow the appointment of two advisors, who, with the present member on the Board, would be empowered to give examinations to chiropractors for licensure.

DR. MISHLER reported briefly for the Legislative Committee in reference to the Army draft situation.

BERGEN COUNTY

John E. McWhorter, M.D., Reporter

The regular monthly meeting of the *Bergen County Medical Society* was held on February 10, 1953, at Holy Name Hospital, Teaneck, with the vice-president, DR. WINTON H. JOHNSON, presiding in the absence of the president.

The following were elected to membership: DR. RICHARD M. SIEGEL to associate membership; DR. ROBERT NELSON from associate to regular membership and DR. JOHN KLAUBER to courtesy membership.

The vice-president announced several medical meetings to be held in the future. He also read the recently delivered opinion of the State Judicial Council concerning the ethics of "fee splitting". Full details were published in the February issue of the Bergen County Bulletin.

The speaker of the evening was DR. MACK LIPKIN, Professor of Psychosomatic Medicine, Polyclinic Hospital, New York, who spoke on "Psychosomatic Medicine."

CAMDEN COUNTY

James P. Harbeson, III, M.D., Reporter

The regular meeting of the *Camden County Medical Society* was held at the Dispensary Building on January 6, 1953, with President COLLIER presiding.

DR. ERNEST G. HUMMELL and DR. GRAFTON SIEBER were presented with 50 year certificates.

DR. I. S. TASSMAN, Professor of Clinical Ophthalmology, Graduate School of Medicine, University of Pennsylvania, presented an interesting paper on "Important Eye Conditions as Seen in General Practice."

DR. I. GRAFTON SIEBER was elected to honorary membership and DR. RALPH J. ONOFRIO, to active membership.

A resolution approving fluoridation of public water supplies was presented to the society and adopted.

The regular meeting of the *Camden County Medical Society* was held on February 3, 1953 with President COLLIER presiding.

DRS. WILLIAM YOUNG, ALFRED S. CONSTON, and RONALD M. BERNARDIN were elected to active membership.

DR. ROBERT N. BOWEN introduced the speaker, DR. LEWIS L. CORIELL, Medical Director of Camden Municipal Hospital. DR. CORIELL gave an interesting talk on "Recent Advances in the Control of Poliomyelitis," reporting on the investigation of the efficacy of immune gamma globulin.

CUMBERLAND COUNTY

Frank J. T. Aitken, M.D., Reporter

The regular monthly meeting of the *Cumberland County Medical Society* was held at Richards Farm, Vineland, on February 12, 1953. There were 30 members present. President DR. NORMAN HENRY was in the chair.

DR. KERDASHA of Vineland was voted into the Society by transfer from Camden County as was DR. DUFFY of Millville from Luzerne County, Pennsylvania.

DR. LEVINSOHN reported on the firm footing of public relations—our score was 49 and improvement is contemplated. The treasurer reported a balance of $1,441.36.

DR. HERBERT H. WILSON of Bridgeton and DR. CHARLES W. WILSON of Vineland were made emeritus members of this Society by acclamation.

DR. CHARLES SHARP suggested inviting local legislators to one of our meetings to foster closer relations and better understanding of pertinent legislation pending.

The speaker of the day was the orthopedic surgeon, DR. ANTHONY F. DE PALMA, who spoke on shoulder disabilities resulting from injuries and their management.

GLOUCESTER COUNTY

Louis K. Collins, M.D., Reporter

The scientific program opened the January meeting of the *Gloucester County Medical Society*, which was held on the 15th at the Woodbury Country Club. MAX M. STRUMIA, M.D., Director, Laboratory of Clinical Pathology, Bryn Mawr Hospital, Bryn Mawr, Pa., spoke on the subject "Recent Advances in Practical Aspects of Treatment of Leukemia."

President DON B. WEEMS then conducted the business meeting.

ROLAND P. STRATTON, M.D. of Wenonah was voted to full membership in the society. Reporting jointly for the Legislative Committee, WENDELL BURKETT, M.D. and I. N. PATTERSON, M.D. discussed the present status of chiropractic legislation, and the two bills that might be presented to the State Legislature. DR. PATTERSON also mentioned a House of Representatives Bill concerning the utilization of chiropractors by the Veterans Administration.

HUDSON COUNTY

John L. Varriano, M.D., Reporter

Hudson County Medical Society held its regular monthly meeting on January 6, 1953, at Murdoch Hall, Medical Center, with DR. PERLBERG presiding.

The Society's By-Laws were amended to include Section 4 (b), Chapter V (Dues), as follows:

> No assessment shall be levied against any member in good standing if (a) he shall have attained the age of seventy years, or (b) he is serving with the armed forces of the United States, or (c) he is exempted by the component society from the payment of annual dues for financial reasons.

The chairman of the physicians' resources committee read a report of the committee's activities since 1950 and included a statement of its resignation as of January 2, 1953.

The present status of malpractice insurance, both on a local and national level, was discussed from the floor.

A set of resolutions pertaining to alleged offenses on the part of "certain hospitals" against the "ethics, the rights and the privileges" of the charters of these hospitals was adopted.

The guest speaker was DR. FRANK H. LAHEY of Boston, who presented a comprehensive, illustrated lecture on "Lesions of the Colon, Rectum and Ileum."

With DR. PERLBERG presiding, the Society held its regular monthly meeting at Murdoch Hall, Medical Center, on February 3, 1953.

The Society heard a comprehensive report by DR. ROYAL A. SCHAAF, member of the State Board of Medical Examiners, on chiropractic licensure in New Jersey from 1920 to the present, following which, a motion was adopted that the local Society support the present position of the State Society with regard to pending chiropractic legislation.

The meeting was addressed briefly by MR. RICHARD I. NEVIN, Executive Officer of the State Society, who offered his assistance in solving problems that may occasionally confront this component society.

The present cost and curtailed procurability of malpractice insurance was discussed by DR. RUOFF with members speaking from the floor. DR. RUOFF also suggested that this county society follow the example of Passaic County Medical Society in inviting legislators to participate in a joint meeting with doctors once a year, thus establishing and maintaining a helpful channel of communication between the two professional groups.

Present difficulties surrounding establishment of a centrally located cerebral palsy clinic in Hudson County were reviewed, with emphasis on the need for immediate action. A pertinent resolution was tabled for a later meeting.

DR. HOWARD NUNES of Jersey City was elected to membership.

A motion was adopted that the immediate past president of the Society remain a member of the Executive Committee for one year following his term of office.

BRET RATNER, M.D., Professor of Clinical Pediatrics at N. Y. Medical College, and Director of Pediatrics at Sea View Hospital, spoke on the subject: "Treatment of the Allergic Child".

MIDDLESEX COUNTY

Harold V. Cano, M.D., Reporter

The regular monthly meeting of the *Middlesex County Medical Society* was opened by DR. CARLYLE MORRIS, the president, at 9:00 p.m. at Roosevelt Hospital, Metuchen, on January 21, 1953.

DR. WILLIAM H. AINSLIE, of Metuchen and DR. ROBERT C. STEINMAN, of Stelton, were elected to regular membership.

DR. SLOBODIEN, Chairman of the Medical Liability and Insurance Committee stated that an extension for enrollment in the Hospital Service Plan has been granted to March 31, providing 51% subscribe. Doctor Morris suggested that the office secretary send follow-up cards to all members of the Society.

A letter from the State Board of Child Welfare in regard to an upward adjustment of fees for house and office visits was approved. The adjustment raises the office fee from $2.00 to $3.00 and the house fee from $3.00 to $4.00. When more than one patient is seen on the same house visit, $1.00 will be paid for each additional patient, with a maximum of $6.00 allowed for any one visit.

The guest speaker of the evening was MICHAEL SCOTT, M.D., Professor of Neuro-Surgery at Temple University, who spoke on "The Neurosurgical Approach in the Treatment of Acute Cerebrovascular Accidents".

MORRIS COUNTY

Albert Abraham, M.D., Reporter

The *Morris County Medical Society* held its regular January meeting at the Morris County Golf Club on January 15, 1953.

The meeting was held jointly with the Morris County Bar Association for the purpose of promoting mutual understanding between members of the two professions and to further common aims.

The meeting was addressed by Dr. Henry A. Davidson of Arlington, Virginia. Dr. Davidson formerly engaged in the private practice of psychiatry in New Jersey, but at present is in the central office of the Veterans Administration office in Washington, D. C.

Dr. Davidson, for ten years editor of The Journal of The Medical Society of New Jersey and presently its Editorial Consultant, has had a wide experience in medico-legal affairs and has recently written a book entitled *Forensic Psychiatry*. Dr. Davidson dipped into his past experience and addressed the joint meeting on "How To Be Happy Though Cross Examined." He described the situation of the perplexed and perspiring medical witness and told what could be done to alleviate the perspiration. He also described the aggravation of the attorney in court and suggested procedures for minimizing this.

PASSAIC COUNTY

David B. Levine, M.D., Reporter

The regular monthly meeting of the *Passaic County Medical Society* was held at the Medical Society Building on December 15, 1952. Dr. Joseph M. Keating presided.

The following were elected to membership: Active —Doctors Alfred P. Griffith, Preakness; Le Roy Curtis, Gordon W. Howe, Seymour Nochimson, William Snyder, Eugene L. Wild, all of Paterson; Herbert Salzberg, East Paterson; Sidney F. Wein, Passaic; Associate—Doctors Ernest C. Lydecker, Paterson; Carrol R. McCune, Pompton Plains.

Article I, Section 3 of the By-Laws, concerning emeritus membership, was amended to conform with State Society requirements.

Dr. Levinsohn, chairman of the Program Committee, introduced the Hon. Arnold M. Smith, General Assembly of New Jersey, who spoke on "The Report of the New Jersey Medical College Commission." Vincent P. Butler, M.D., Second Vice-President and chairman of the Medical School Committee of the State Medical Society, and Maxwell J. Lentz, D.D.S., chairman of the Medical-Dental School Committee of the State Dental Society, discussed the medical and dental aspects respectively of this project.

The principal speaker of the evening was Jean A. Curran, M.D., Dean of the State University of New York College of Medicine, Brooklyn, who gave a very interesting talk on the necessity of two medical-dental schools for a state as wealthy and densely populated as New Jersey.

A special meeting of the society was held at the Medical Society Building on January 6, 1953, with the President, Dr. Joseph M. Keating, in the chair. This meeting was called for the purpose of establishing the society's views on proposed changes in the Doctor Draft Law (P.L. 779).

After a comprehensive discussion of many aspects of this problem, the society adopted a resolution in which:

1. It endorsed extension of the Doctor Draft Law.

2. It recommended that no World War II veteran be recalled to military service until every available physician who has not previously served, has been called.

3. It favored reducing physical requirements for medical officers to the extent that anyone able to engage in civilian practice be permitted to practice medicine in the Armed Forces on a limited duty basis if necessary.

4. It urged release from military service of any veteran physician who has already been recalled to military duty.

A copy of this resolution was forwarded to interested legislative parties.

UNION COUNTY

Leslie M. Townsend, M.D., Reporter

A regular meeting of the *Union County Medical Society* was held Wednesday evening, January 14, 1953, at the Johnson and Johnson auditorium in Cranford. Our president, Dr. Emanuel Satulsky, presided and after discussion the society took appropriate action on the following items of new business:

(1) Voted to approve the fluoridization of public water supply in our area.
(2) Voted that member physicians be reminded by notice in our bulletin of the legal responsibility of physicians to report newly discovered tuberculosis cases to their local health officers, and
(3) Approved a resolution, proposed and passed by the Bergen County Medical Society, protesting the drafting, for the armed services, of veteran physicians in Class IV until all physicians in Classes I, II and III have been called up for active service.

Before the stated program Miss Eleanor P. Duffy of the Visiting Nurse's Association of Eastern Union County, spoke on public health nursing and current problems faced by the V.N.A.

The program of the evening consisted of a panel presentation on the subject of "Estate Planning." Speakers introduced by our Program Committee chairman Dr. Kenneth Day were Mr. Howard Petet, Mr. Henry P. Green and Mr. S. P. Anderson, all of the Equitable Life Assurance Society. The panel members illustrated, by the case problem method, various programs for estate creation and conservation, emphasizing the role of life insurance and annuities and the vital professional advice needed from the lawyer, the trust officer, and the accountant, as well as from the insurance agent, in any complete estate planning survey.

WOMAN'S AUXILIARY

PRESIDENT'S MESSAGE

AUXILIARY TRENDS

Mrs. Edward H. Dyer, President

If we wish to see the future of an organization, we should observe current trends. Over the years, some of these trends are accomplished others are modified because of changing conditions. Any social organization must be dynamic—so with our Auxiliary, organized to promote "good fellowship among physicians' families and assist the Medical Society in its program for the advancement of medicine and public health."

Because of the very nature of the Auxiliary, composed as it is of members from all parts of the state, trends cannot be easily identified. Our trends are a composite of numerous ideas that crystallize into potential action. Our Nurse Recruitment Program, Health Education and Safety Programs, study and action concerning pertinent health legislation, all give evidence of our growth and awareness of the problems of today. Other trends are the changes in our administrative technic and implementation of the Auxiliary program based on the ideal of service to the Medical Society and to the public. Many trends observable a few years ago have become actualities. Let us not falter in seeing that these worthwhile trends become realties and attain our single purpose — the achievement of the Auxiliary program.

A MESSAGE FROM THE EDITOR OF TODAY'S HEALTH

W. W. Bauer, M.D.

Because of the operating deficit for *Today's Health* in 1952, it is necessary that I appeal to every member of the Woman's Auxiliary to the American Medical Association for her personal support of the magazine in 1953.

As the wife or mother of a physician, each Auxiliary member can exert her influence toward attaining the necessary goal for 1953 of "a subscription for *Today's Health* from every physician."

Such an increase in the number of subscribers would greatly offset the financial burden to the Association of editing and publishing the magazine for the health education of the American public.

I know that the Woman's Auxiliary will, as always, collectively and individually rally to this cause and give us its full cooperation in this concentrated drive for new subscribers.

AUXILIARY REPORTS

Camden County

Mrs. George W. Hager, Jr., Publicity Chairman

The *Woman's Auxiliary to the Camden County Medical Society* held its annual reception for new members on Tuesday afternoon, February 3, 1953, at the Haddon Fortnightly, Haddonfield.

Mrs. William Braun, President, presided at the business meeting. Election of officers took place with the following elected to serve next year: President—Mrs. Kenneth L. Athey, President-Elect — Mrs. Ralph K. Bush, 1st Vice President—Mrs. A. M. K. Maldeis, 2nd Vice President — Mrs.

Leland Stetser, Recording Secretary — Mrs. Harold P. Coxson, Corresponding Secretary — Mrs. E. A. Y. Schellenger, Treasurer — Mrs. David West. Directors elected to serve for three years are: Mrs. Vincent McDermott, Mrs. William Braun.

Mrs. Thomas H. McGlade, Nurse Recruitment Chairman reported that the Haddonfield High School now has a very active Nurses Club among their students. Forty girls are doing volunteer work in the three Camden Hospitals each Friday afternoon.

Mrs. Lester R. Wilson announced that the Nurse Scholarship Fund Card Party and Fashion Show, will take place at 8:00 p.m., March 6 at the Naval Reserve Training Center in Camden.

The program for the afternoon consisted of three vocal selections by Miss Marietta Di Iesli of Haddon Heights, after which Mrs. Ralph K. Bush introduced the guest speaker for the afternoon, Mrs. S. Herbert Taylor. Mrs. Taylor's program was entitled, "I'm Stage Struck". She very delightfully reviewed several current plays from both the New York and Philadelphia stage.

Cape May County

Mrs. Paul Yingling, Publicity Chairman

Mrs. Ada Taylor, advertising manager of the Claridge Hotel, Atlantic City, was the guest speaker of the *Cape May County Medical Auxiliary* at our regular meeting on Tuesday evening, January 20. Mrs. Taylor served in an executive capacity on the American Board of the Olympic Games. She told the history of the Olympiad and compared the original games with those that are held now. Mrs. Taylor also told of some amusing events which highlighted her trip through several northern European countries.

Mrs. Goldie Wallen, an Auxiliary member, reported that the Rural Health films which she has been showing to various organizations throughout the County have been well received.

The Auxiliary has set up a Nurse Scholarship with the Medical Society.

Cumberland County

Mrs. E. C. Green, Chairman, Press and Publicity

A luncheon meeting of the *Woman's Auxiliary to the Cumberland County Medical Society* was held at the Circle Restaurant in Vineland at 12:30 p.m., on February 5, at which time the keynote of the year's program was stressed by the chairman of Nurse Recruitment, Mrs. Samuel B. Pole, III.

Representing the Bridgeton High School as assistant guidance director, Miss Zelda Pineless explained in detail how each junior and senior girl is directed or guided into a field of further training best suiting her particular aptitude, ability and interest. Miss Pineless pointed out the ways in which the high school helped the girls already interested in nurses' training and guided those who were undecided but potential prospects.

Miss Theresa Gray, director of nurses at Bridgeton Hospital, continued the discussion from a hospital angle, emphasizing the national shortage of nurses as being very acute. Both speakers expressed the feeling that the auxiliary could help encourage girls to go into nursing.

Mrs. Pole presented a similar picture of circumstances in Vineland and Millville, and announced a tea to be held at the Bridgeton High School Library on April 15, for girls interested in nursing.

Preceding the keynote speakers, Mrs. Edward H. Dyer, president of the state auxiliary, spoke briefly in regard to the state and A. M. A. conventions. Mrs. Dyer urged the women to back the resolution that there be a medical-dental school in New Jersey.

Essex County

Mrs. Louis L. Covino, Chairman, Press and Publicity

The *Woman's Auxiliary to the Essex County Medical Society* celebrated its 25th birthday with a dinner dance on January 24, at the Military Park Hotel, Newark. Mrs. Joseph Clarken of Newark, was dance chairman assisted by Mrs. Frank S. Forte of Newark, as her co-chairman.

Mrs. Phillip D'Ambola of Harrison, decorations chairman, assisted by Mrs. John McGuire of Newark, kept the silver theme evident with glittering silver candles and silver and blue wreaths enclosing a large 25 as a centerpiece on each table.

Mrs. Fred Meinhard of Bloomfield, shares chairman, as mistress of ceremonies, awarded the prizes to the winners of the shares. Shares had been sold to help augment our Nurse Scholarship Fund. First prize went to Miss Elizabeth Boehme, second prize was won by our president-elect to the State Auxiliary, Mrs. Frank S. Forte and the third prize was won by Mrs. Edwin Ciccone of Newark. Preceding the awards, Dr. Harrold A. Murray, President of the New Jersey Medical Society, introduced Dr. William Hahn, President-elect of the Essex County Medical Society and Mrs. Jerome Kaufman, President of the Auxiliary.

Dr. Murray and Mrs. Meinhard led the group at large in a Paul Jones and started everyone off to a gay evening. Dr. and Mrs. Aaron Finkelstein of Newark won the Tango Contest.

The regular meeting was held on January 26 at the Contemporary Lounge, Newark, with Mrs. Jerome Kaufman presiding. As the meeting was two days after our big dance the program chairman, Mrs. Phillip D'Ambola, planned a social afternoon. Mrs. John Torppey spoke on child safety and, in particular, the hazard of keeping unused iceboxes around. She pointed out the number of children that have lost their lives in recent years because of this hazard.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Endocrine Treatment in General Practice. Ed. by Max A. Goldzieher, M.D. and Joseph W. Goldzieher, M.D. with 21 contributors. Pp. 474. New York, Springer Publishing Co., Inc., 1953. ($8.00)

Rapid advances in endocrine research have kept pace with startling developments in biochemistry, general medicine and surgery in the last ten years.

The clinical application of endocrine research in everyday medical and surgical practice has been instrumental in prolonging life, rehabilitating the chronically ill and saving lives in many critical situations. It has become imperative for physicians to be aware of these recent advances in order that the patient may benefit fully.

This volume edited by Drs. Max A. and Joseph W. Goldzieher, consists of contributions of twenty-one outstanding clinicians in medicine and surgery, who occupy teaching positions throughout the country. Each of these clinicians has contributed an article in his own field. There are chapters on the circulatory, respiratory and digestive systems. The physiology and pathology of all endocrine glands and the use of endocrine therapy in their disorders are thoroughly discussed under headings such as: obesity, carbohydrate, fat and protein metabolism, and disturbances of the musculo-skeletal system.

Menstrual disturbances, male and female hypogonadism, sterility and the climacteric are discussed and their alleviation by endocrine therapy outlined.

The pitfalls of uncontrolled endocrine administration are brought out and clinicians are urged to use discretion and a conservative approach to the various problems of endocrine dysfunction.

It is impossible for the general practitioner to appraise adequately the numerous endocrine preparations on the market and it is because of its conservative approach to endocrine therapeutics that this book is particularly recommended.

Rita S. Finkler, M.D.

Operating Room Technic. St. Mary's Hospital, Rochester, Minnesota. 4th ed. Pp. 345, with 219 figures. Philadelphia and London, W. B. Saunders Company, 1952. ($6.50)

This completely rewritten fourth edition of an operating room classic dating back to 1924 has included many new procedures which have become routine in up-to-date hospitals.

The nine chapters, two appendices and index of illustrated instruments, are very simply and categorically outlined on excellent paper in large, easily read type, with 219 figures. The first chapter describes the operating room suite at St. Mary's Hospital. In the second chapter one may find described almost any operative procedure in general surgery. Chapter three is devoted to orthopedic procedures, and chapters four and five to neurologic and urologic procedures, respectively. A new chapter on peroral endoscopy has been added, as well as a chapter on special surgical procedures, e.g. nerve blocks and venesections. Chapter eight describes the functions of surgical teams with their respective responsibilities to each other and to the patient.

The list of instruments and sutures under each procedure is especially valuable to instrument nurses, although there are some limitations imposed by the preferred technic of the Mayo Clinic surgical staff.

This book is of little value to the surgeon, but is highly recommended for all operating room supervisors, instrument nurses and all surgical interns and residents.

Arthur J. D'Alessandro, M.D.

Culdoscopy; A New Technic in Gynecologic and Obstetric Diagnosis. By Albert Decker, M.D. Pp. 148. (American Monograph Series). Phila., W. B. Saunders Company, 1952. ($3.50)

Culdoscopy, a manual of 148 pages, is the first publication in book form of an important diagnostic procedure in gynecology. The proper use of culdoscopy provides the advantages of an exploratory laparotomy without actually opening the abdomen, particularly in those cases in which accurate diagnosis is impossible or very difficult by the usual clinical methods.

The instrument used, the Decker Culdoscope, is described in detail. It is a telescopic lens similar to the cystoscope. The book describes the manner of placing the patient in the knee-chest position, the use of pneumoperitoneum, and the method of puncturing the cul-de-sac. The conditions in which culdoscopy is indicated are discussed, chiefly suspected ectopic pregnancy and certain sterility problems. In addition, therapeutic and operative possibilities are suggested to a limited degree.

Photography in color of the lesions as visualized through the culdoscope is possible permitting the accumulation of material for teaching and research purposes.

Culdoscopy is earning acceptance in many of the teaching clinics as a useful and safe method in the diagnosis of obscure conditions. Dr. Decker deserves great credit for his splendid efforts in developing culdoscopy so that it may be practiced by others. There is no question that this manual will be enlarged and will take its place as a permanent addition to the gynecologic literature.

Robert Berman, M.D.

Vision (Vol. 2 of Physiology of the Eye). By Arthur Linksz, M.D., Assistant Clinical Professor of Ophthalmology, New York University Postgraduate Medical School. Pp. 869. New York, Grune and Stratton, 1952. ($19.00)

The physiology of a sensory organ is by its nature a difficult subject as it deals with the conversion of a physical stimulus into a sensation and perception, a process not exposed to direct observation, and where physiology borders on psychology and even speculative philosophy. This pertains even more to the highest sensory organ—the eye which is the main connecting link between the ego and the physical world.

Dr. Linksz is particularly qualified to write on these problems since they have been the main interest in his life. He was connected with the Physiological Institute in Prague, where he worked under Tschermak, a pupil of Hering, and later continued this work at Dartmouth College.

This book on vision is the second volume of a three-volume work on physiology of the eye. It is divided in four parts:

1. Analysis of sensation.
2. Pattern and detail vision.
3. The perception of spatial relationship.
4. Vision and oculo-motor reflexes.

It consists of thirty-three lectures which loosely follow the author's lectures given in the Lancaster Course.

The problem of color vision is dealt with in the first chapter. A historical outline is followed by a detailed presentation of the different theories. The author takes a definite stand in favor of Hering's tetrachromic theory. To better illustrate the relationship between the physical stimulus and the physiologic sensation, the author makes here a comparison with another sensory organ, namely, with the sensation of "warmth" and "cold" where two different sensory organs (Ruffini receptors and Krause end bulbs) respond to different temperatures. These two paired organs are mutually exclusive. Similarly, the tetrachromic theory is based on the acceptance of different sensory organs within the retina: red-green and yellow-blue, the latter being a paired organ in analogy to warm-cold.

Very interesting is the chapter on spatial relationship where the parallelism between the anatomic structure of the visual organs (eye and occipital region of the brain) and the physiologic phenomena and perception is stressed. The last chapter on oculo-motor reflexes contains much data pertaining to our daily practice.

It is rather significant that this book primarily originates from lectures given by the author back in 1935 on "The Role of Sensory Organs in the Evolution of the Weltanschauung." It is a Weltanschauung of the author that our world as perceived is a replica of the physical world—light, color, form, space—as it actually exists.

S. SCHULSINGER, M.D.

Disorders of the Circulatory System; a Symposium Presented at the Twenty-Fourth Graduate Fortnight of The New York Academy of Medicine. Edited by Robert L. Craig, M.D. Pp. 301. New York, The Macmillan Co., 1952. ($5.50)

The Annual Graduate Fortnight of the New York Academy of Medicine has been an outstanding opportunity in medical education to physicians of the New York metropolitan area for over a quarter of a century. The present volume records the 1951 lecture series for those in attendance and offers to physicians everywhere a compact and current review of disorders of the circulatory system by a nation-wide faculty. For those in attendance, the delay in appearance of this volume until a full year after the lecture series may well be a disappointment. The first group needs an immediate record of the proceedings, with the obvious opportunity for review and reflection while the subject is still fresh in mind. For the larger group not in attendance, the date line may not have quite the significance but still can hardly be ignored.

This reviewer has nothing but praise for the contents of this little volume which for some time will remain the best and briefest introduction to a wide variety of recent advances in circulatory disorders. Here the physician may not always find easy reading, but he will find the background material to help in evaluating many newer therapeutic regimes featured in both medical and lay press. The physics and biochemistry of heart muscle fiber contraction, both in health and in disease, the relation of lipid metabolism to atherosclerosis, the chemistry of congestive failure and a discussion of endocrine factors in hypertension all exemplify basic science contributions to this symposium. On the more strictly clinical side are the presentations on the cardiac arrhythmias, the treatment of bacterial infections, the management of the various forms of circulatory failure and much of the material on coronary disease which, incidentally, includes a delightful historical perspective of this very important type of heart disease. The section on circulatory responses to life situations is self explanatory as to subject matter but is outstanding in the character of the documentation offered for the hemodynamic effects of emotional stress. Finally the impact of surgery on circulatory disorders is appreciated by noting that sixty pages of this book are devoted to surgical aspects. Here is considered not only all the common congenital defects, but surgery of acquired valve defects, mitral stenosis in particular, and surgery of arterial occlusions.

This book deserves wide recognition because of the importance of the subject, because of the broad field covered embracing both medicine and surgery, and finally because of the general excellence of all contributions.

LESLIE M. TOWNSEND, M.D.

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI March, 1953 No. 3

THE PROBLEMS OF TUBERCULOSIS CONTROL

By Esmond R. Long, M.D., Annals of Internal Medicine, November, 1952.

Recent advances in the treatment of tuberculosis have raised for new consideration the question of proper balance among the procedures now employed in control of this disease.

During the period from 1900 to 1925 there was a rapid advance in diagnosis due to improved roentgenological technics and bacteriological methods. Treatment, which, before 1925, had emphasized fresh air, proper food, and rest, acquired pneumothorax and collapse therapy. The second quarter century was one of accelerated development of case finding, hospitalization for purposes of isolation and care, a variety of measures for prevention, and finally social assistance for patients and their families.

This brings us to the opening of the third quarter. Optimists, watching the declining mortality from tuberculosis, predict its virtual eradication in the United States. Conservatives are concerned with the continuing high prevalence of known cases. In any event there is immediate urgency in coordinating and integrating the present measures. The decision as to the wisdom of a change or modification of our efforts will depend on our evaluation of the success of present measures of which a brief summary is presented for consideration.

Case Finding: There are three major methods of case finding today. The first is the discovery of cases by physicians engaged in private practice. Private practitioners are the ones most likely to have first knowledge of cases that have progressed to actual symptoms. The second is search for cases on a contact basis. This is essentially clinic practice and rests on the principle that one case of the disease comes from another. The third, mass roentgenographic surveys of large segments of the population, is organized on the sound theory that a large enough relatively inexpensive net will gather in most of the unknown cases.

Medical Treatment: Medical treatment has passed through the stages of primary emphasis on hygienic care, collapse therapy, surgical measures, and drug treatment, to the present period of a combination of chemotherapy and surgical practice, and effective rehabilitation. The cardinal requirement is the hospital bed for tuberculosis, and it is indeed the crux of present day problems.

Prevention: Proper treatment is itself a large part of prevention because it removes sources of contagion from susceptible persons. In the best organized communities today, hospital treatment of the patient is supplemented by supervision and education of family at home. To this is added in small segments of our population, BCG vaccination.

Social Assistance: This varies all the way from abolition of the means test as a requirement for hospital admission to direct financial grants to a patient's family during the period of non-employment of the patient. All social assistance programs include rehabilitation of hospital patients. Experience has shown that the patient's morale and faithfulness in taking treatment depend in large part on the support given his family in his absence.

Mortality: Tuberculosis mortality in the United States declined 90 per cent from 1900 to 1950. The mortality in 1950 was only half that of 1945. Tentative figures indicate that the death rate for 1951 was 20 per 100,000 population. A break-

down by race, sex, and age shows that the mortality rate in non-white persons is about three times that in white persons, and that more than half of all deaths from tuberculosis now occur after the age of 45 years. The greatest number of deaths from tuberculosis today occurs in old white males.

Prevalence: It is agreed that the *known* prevalence of the disease has declined little in the last 20 years. Failure to decline is due, in part, to improved case-finding procedures and increased longevity of patients. The total number of cases of active disease in the United States is 400,000, approximately 250,000 of which are known to health departments.

Incidence: The average annual incidence of new cases reported in the whole country has been about 120,000 in recent years. The figure was 118,000 in 1951, a drop of 19,000 cases from the 137,000 in 1948. This drop is probably significant.

Hospitalization: Hospitalization is recognized as the core of tuberculosis control. Until recently the minimum number of beds required for adequate control was judged to be two and a half times the number of deaths from tuberculosis annually in the community. Three beds per annual death were recommended. Many communities are still far from meeting the minimum standard but some substantially exceed it. At present in the United States approximately 102,000 beds are set aside specifically for tuberculosis. The standards in the future may be based on known prevalence rather than deaths.

Cost of Tuberculosis Program: The annual total cost of tuberculosis control in the United States is calculated as $350,000,000, exclusive of construction expense and the cost of training personnel. This includes the sum spent on hospitalization, which is figured at $200,000,000 a year, or more than half the cost of the whole tuberculosis program. Finally, we may note that the average cost of one case of tuberculosis is about $15,000.

With this background, what is the best plan for tuberculosis control in the future? Two courses are obviously open, viz., (1) to keep on as we are doing, improving procedures whenever possible, and (2) to revise the program by introduction of some new principle. We may rest reasonably well assured that in time the first of these procedures will relegate tuberculosis to a minor position among diseases, though only at great cost. It will mean a steady increase in measures for case finding, more hospital beds and larger sums for rehabilitation. If inflation continues, the dollar cost will be magnified. Even so, the price might be small in comparison with allowing tuberculosis to persist in our population.

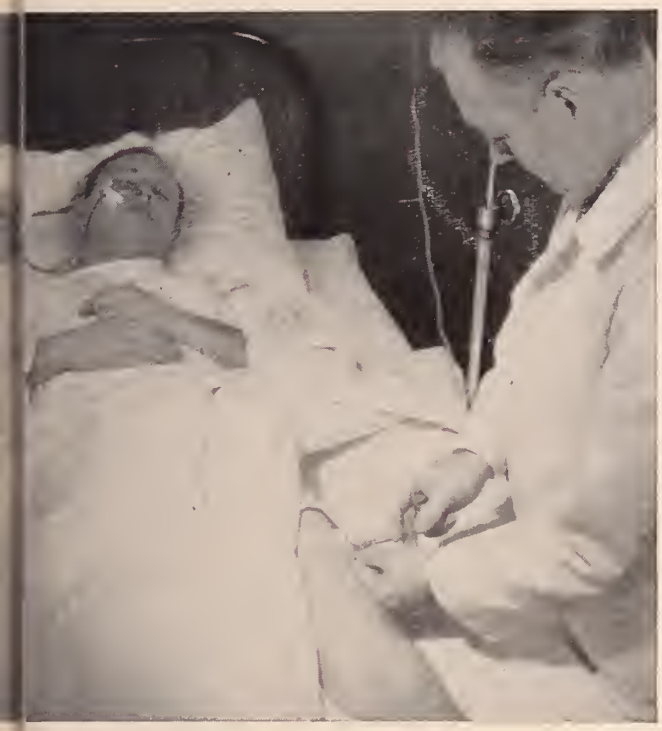
A better course cannot be outlined now, but some elements of the program merit careful scrutiny. The hospital program costs $200,000,000 and this will probably be increased. The internist may inquire if full advantage is being taken of the powerful force of private practice in supplementing hospital care. Hospitalization in effect does not provide for all the tuberculous patients in need of care and many hospitals have waiting lists. The latest and best methods of surgery and chemotherapy have not shortened but frequently have lengthened the optimum period of hospital stay.

Herein, however, lies one possible change in which the private practitioner is concerned. After completion of the necessary active therapy and accompanying indoctrination in personal care, could not the time-consuming final steps in the cure, particularly the essential long continued chemotherapy, be carried out at home, with safety and success, by private physicians?

This suggestion may have merit. Much depends on improved understanding of tuberculosis by physicians in general practice and on the character of the homes in which treatment is given. Tuberculosis is most prevalent today in the economically underprivileged. The problem is not purely medical, but is inextricably bound up with social issues. There is reason to hope that the standard of living will continue to rise. In the meantime, more intelligent application of the skills of practicing internists may solve part of the problem. Competent home after-care of tuberculous patients who have had a satisfactory course of institutional treatment, is one possible way of saving hospital time and relieving bed shortages.

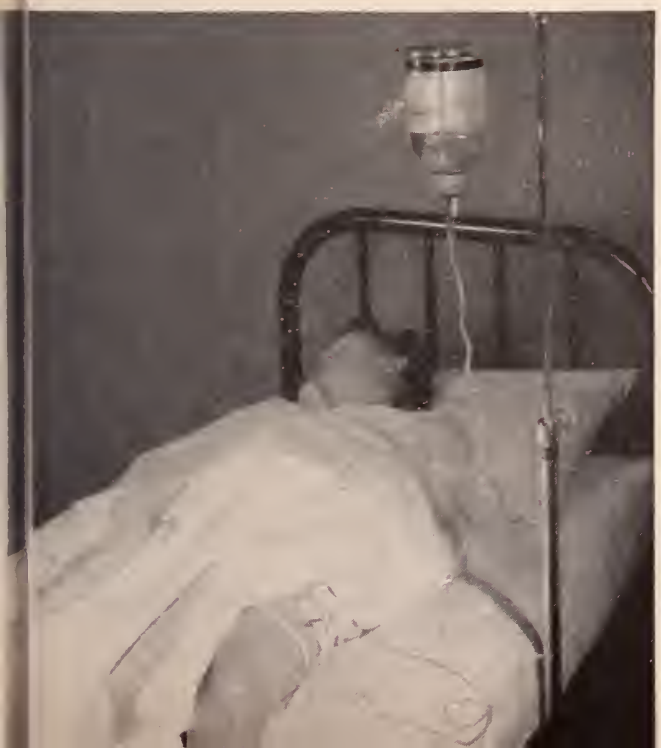
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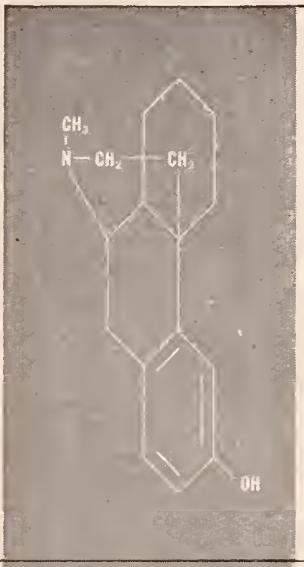
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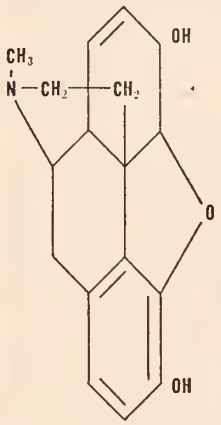
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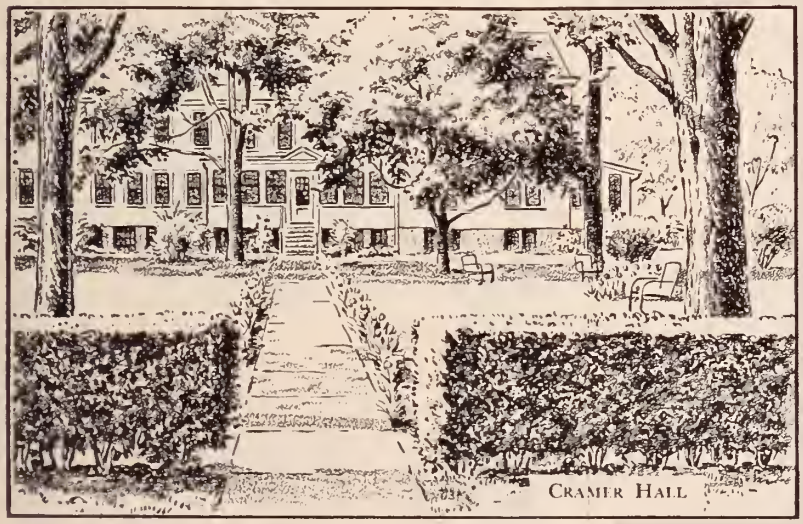
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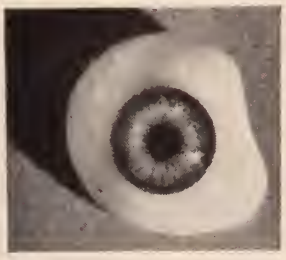
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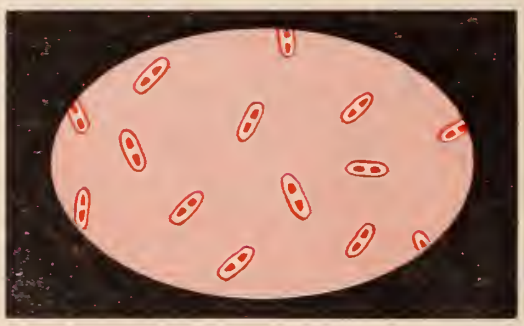
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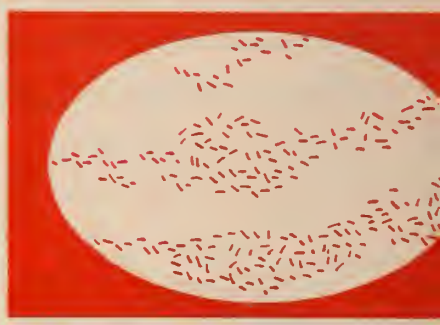
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CONTENTS—Pages 127 to 166

THE N.Y. ACADEMY OF MEDICINE AUG 21 1953 LIBRARY

EDITORIALS— Page

PRESIDENT'S MESSAGE 127
ANNUAL MEETING CALL 128
WORKMEN'S COMPENSATION LAW 129
MEDICAL RESEARCH IN NEW JERSEY 130
SOLITARY LUNG NODULES 131

ORIGINAL ARTICLES—

THE MEDICAL SOCIETY OF NEW JERSEY—ITS FIRST QUARTER CENTURY—Fred B. Rogers, M.D., Trenton, N. J. 132

NEW JERSEY SERVICE TO THE PHYSICALLY HANDICAPPED—Henry A. Brodkin, M.D., Newark, N. J. 135

THE HEADACHE PROBLEM—Sydney F. Smith, M.D., Highland Park, N. J. 138

TOWARDS BETTER SCHOOL HEALTH EXAMINATIONS—Neil Castaldo, M.D., Cranford, N. J. 148

ORIGINAL ARTICLES— Page

CLINICAL INVESTIGATION OF THE ORAL MERCURIAL NEOHYDRIN OVER A ONE YEAR PERIOD—William A. Leff, M.D. and Harvey E. Nussbaum, M.D., Newark, N. J. 149

GENERALIZED DERMATOSIS CAUSED BY DENTAL INFECTION—Seymour L. Hanfling, M.D. East Orange, N. J. and Samuel N. Knopf, D.D.S., Brooklyn, N. Y. 153

STATE ACTIVITIES—

Your Plaque 156
Medical Research Committee 156
Workmen's Compensation Seminar 157

OBITUARIES 158
MEDICAL-SURGICAL PLAN 159
COUNTY SOCIETY REPORTS 160
WOMAN'S AUXILIARY 162
BOOK REVIEWS 163
TUBERCULOSIS ABSTRACTS 165

Roster of Officers and Committee Chairmen, Advertising page 3A

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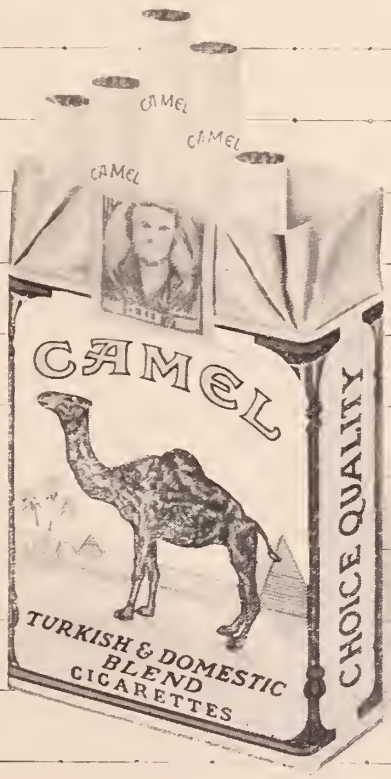
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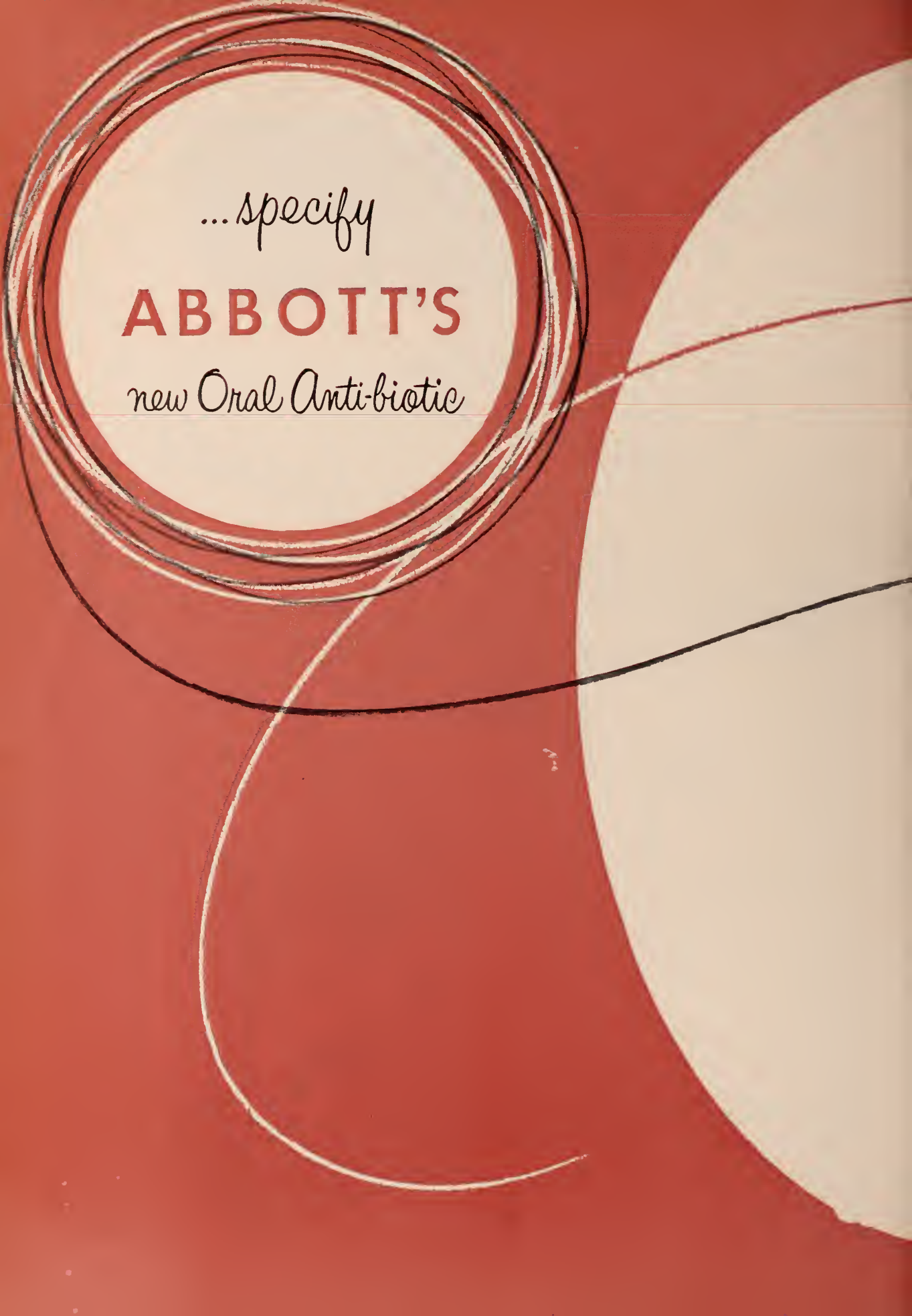
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1. McGuire et al. (1952), J. Antibiotics & Chemo., 2:281, June.
2. Heilman et al. (1952), Proc. Staff Meet. Mayo Clin., 27:385, July 16.
3. Haight and Finland (1952), New Eng. J. Med., 247:227, Aug. 14.



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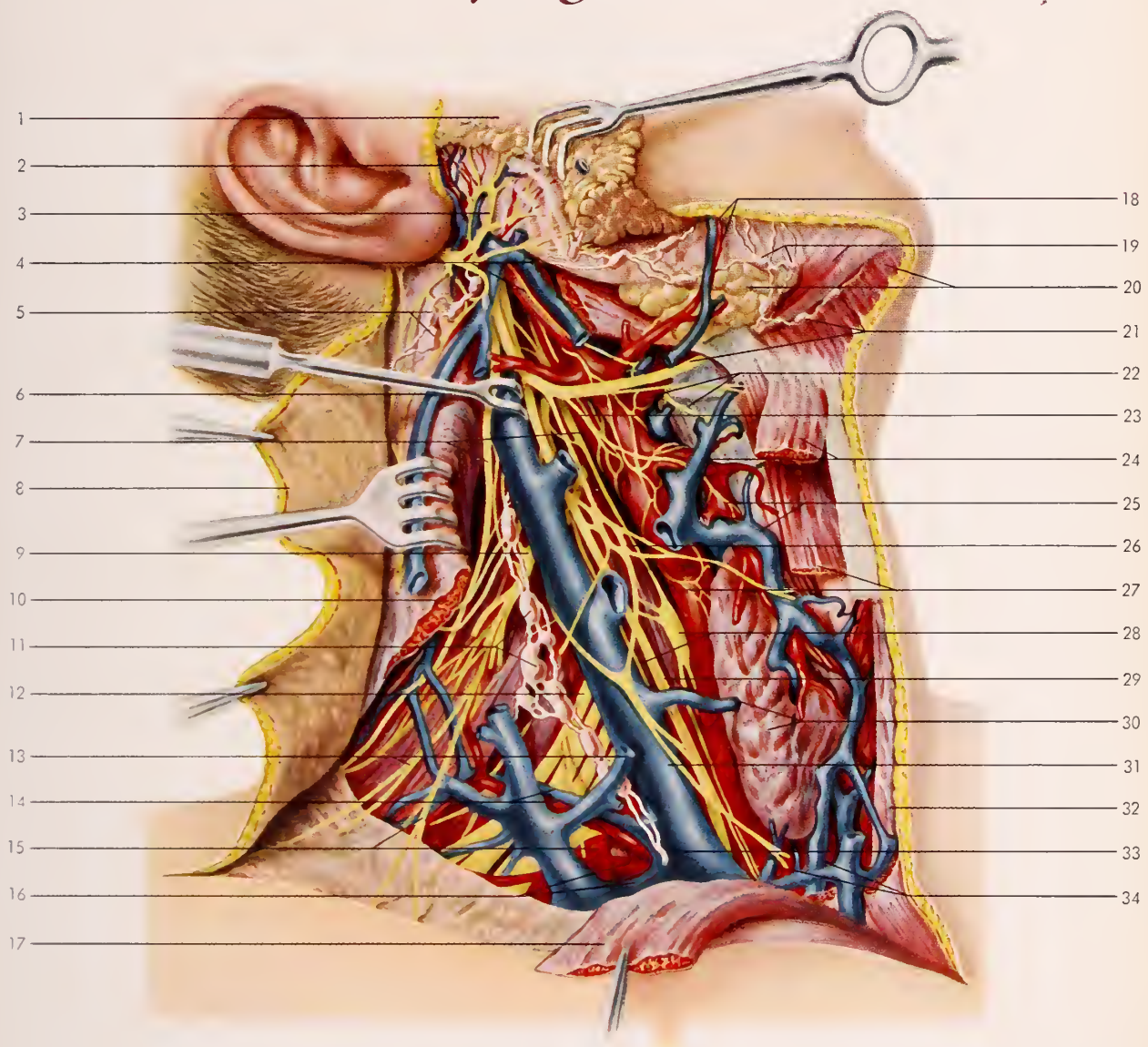
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Anatomy *of the* Neck



1. Parotid gland
2. Superficial temporal artery & vein
3. Temporal branch of facial nerve
4. External carotid artery & posterior facial vein
5. Superficial cervical lymph nodes
6. External jugular vein
7. Accessory nerve & internal carotid artery
8. Platysma muscle
9. Fourth cervical nerve
10. Superior position of sternocleidomastoid muscle
11. Deep cervical lymph nodes
12. Fifth cervical nerve
13. Posterior supraclavicular nerve & anterior jugular vein
14. Superficial cervical artery & vein
15. Middle supraclavicular nerve & subclavian artery
16. Transverse scapular artery & vein
17. Inferior position of sternocleidomastoid muscle
18. External maxillary artery & anterior facial vein
19. Submaxillary lymph nodes & digastric muscle
20. Submaxillary gland & mylohyoid muscle
21. Submental lymph nodes & hypoglossal nerve
22. Superior laryngeal artery & nerve
23. Superior cervical ganglion
24. Superior laryngeal vein & omohyoid muscle
25. Superior thyroid artery & vein
26. Ansa hypoglossi
27. Common carotid artery & sternothyroid muscle
28. Middle cervical ganglion & phrenic nerve
29. Vagus nerve
30. Thyroid gland & middle thyroid vein
31. Internal jugular vein
32. Sternohyoid muscle
33. Jugular lymphatic trunk
34. Inferior thyroid veins

This is one of a series of paintings for Lederle by Paul Peck, illustrating the anatomy of various organs and tissues of the body which are frequently attacked by infection, where aureomycin may prove useful.

Lederle

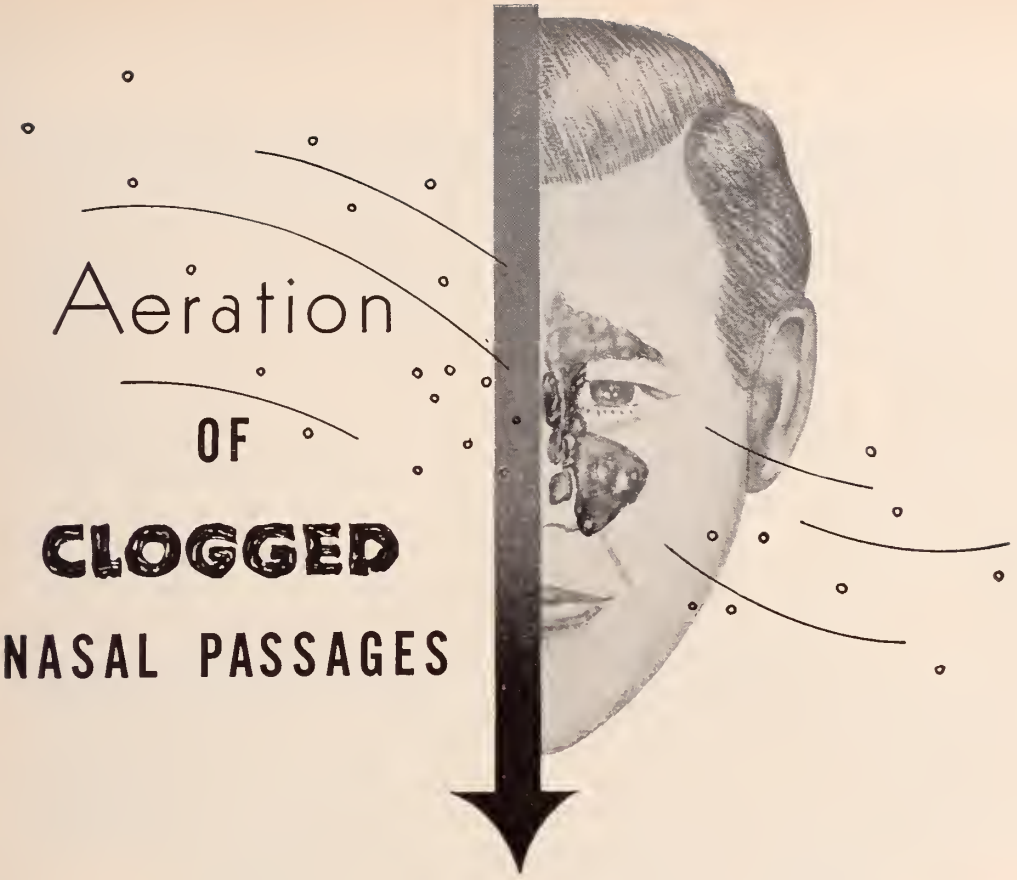
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1. Von Alyea, O. E., and Donnelly, Allen: Arch. Otolaryng., 49:234, Feb., 1949.

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1. Humphreys, P., et al.: Angiology 3:1 (Feb.) 1952.
2. Plotz, M.: New York State J. Med. 52:2012 (Aug. 15) 1952.
3. Perlman, A.: Angiology 3:16 (Feb.) 1952.

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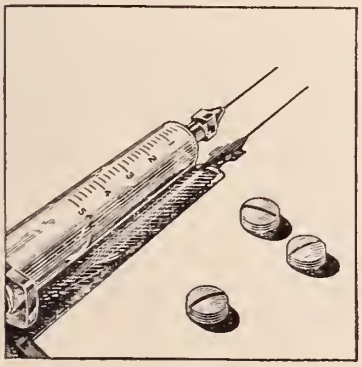
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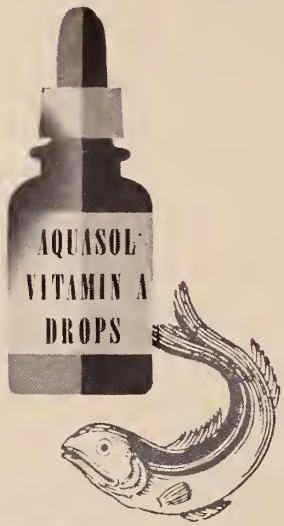
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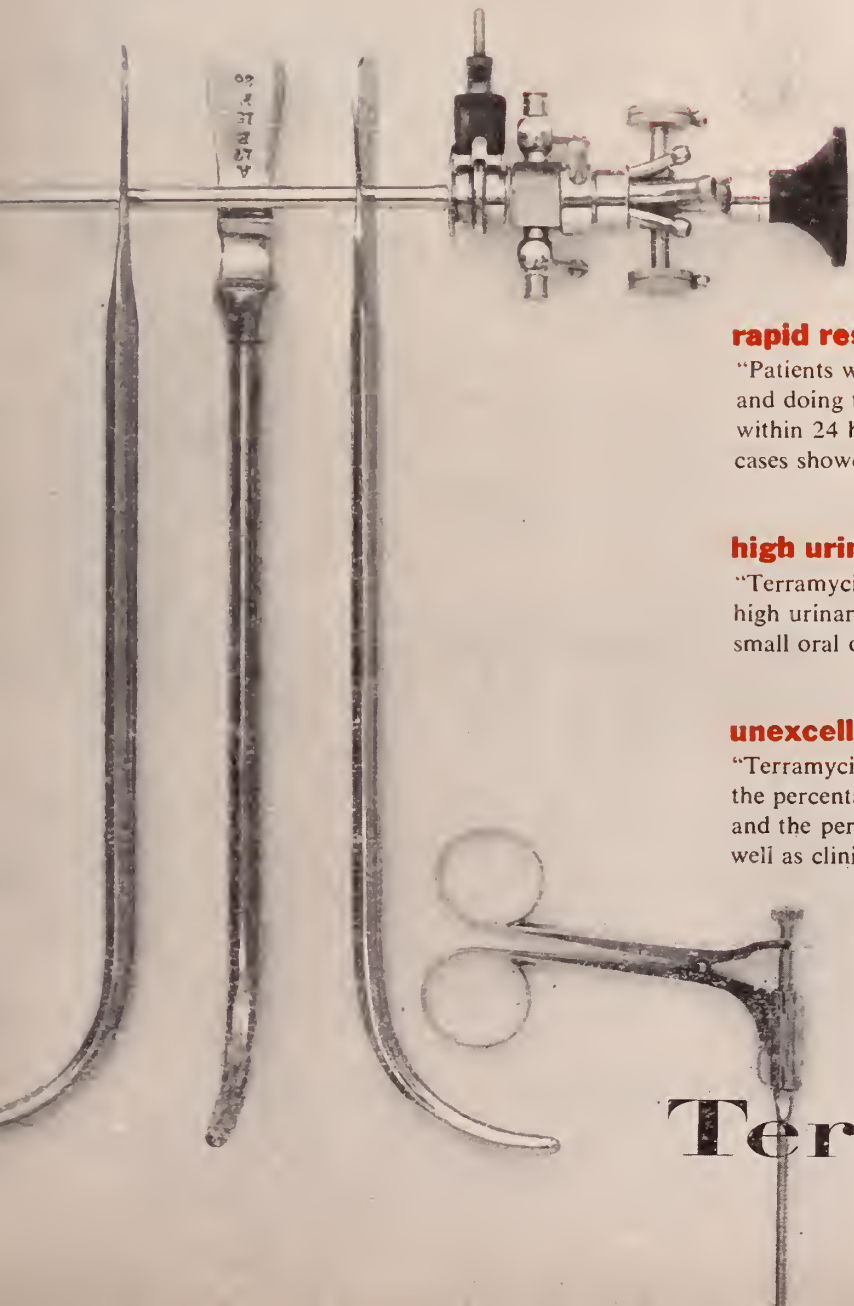
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2. Kramer, B., et al.: Am. Jl. Dis. Child. 73:543, 1947
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6. Popper, H., et al.: Gastroenterology 10:987, 1948
7. Davidson, D. M., et al.: Jl. Invest. Derm. 12:221, 1949
8. Nutrition Reviews 6:248, 1948



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1. Canad. M. A. J. 66:151 (Feb.) 1952.
2. J. Urol. 67:762 (May) 1952.
3. Ibid. 69:315 (Feb.) 1953.

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[1]Evans, R. R., and Rackemann, F. M.: *A.M.A. Arch. Int. Med.* 90:96–127, July 1952.



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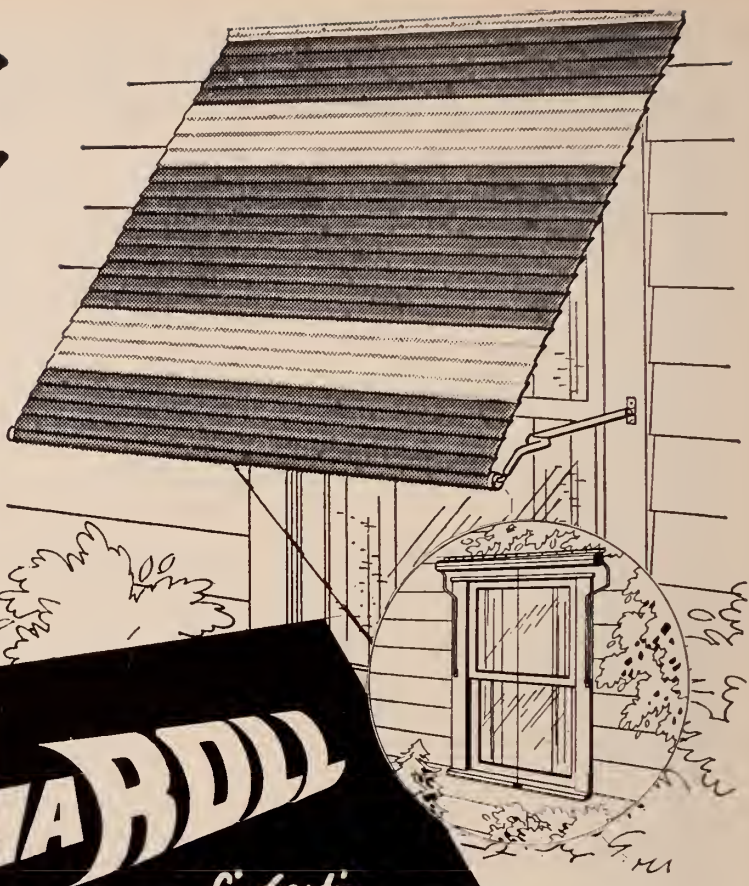
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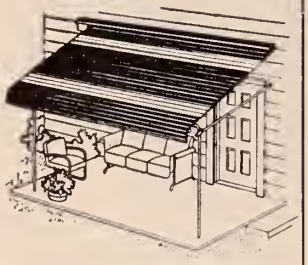
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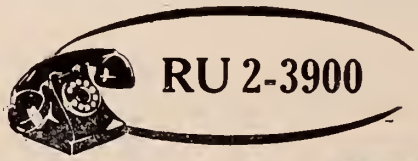


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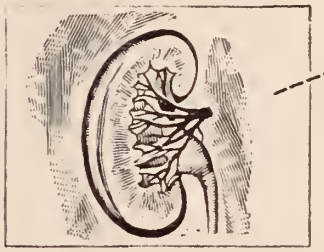
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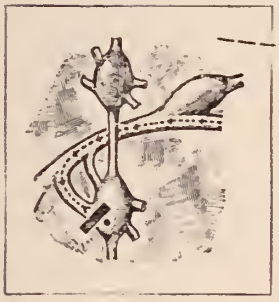
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PRESIDENT'S MESSAGE

THE SPOTLIGHT IS ON US

Abraham Lincoln once said: "Public opinion is everything. With public opinion nothing can fail. Without it, nothing can succeed. Consequently he who moulds public opinion goes deeper than he who enacts statutes or pronounces decisions." Each member of our medical society should remember these words. They are the basic principle of good public relations.

One of the important challenges of this year was the institution of a good public relations program. During my administration I attended over two hundred meetings of professional and non-medical groups. I was invited to attend these meetings as the president of a very old and honored society—the oldest state medical society in the western hemisphere. At many of these meetings I learned that our society was being criticized because of the actions of a few of our members.

We have embarked upon a sound public relations program but we have only scratched the surface. Gone are the days when the public will accept promises for better relations or be convinced of our good intentions by impressive press releases. These are the days of action—not words alone.

Our members are quick to resent the criticism of the public and to object to the fact that cults flourish within our midst. We must realize that many times it is our own fault that we are held in disrepute and that patients are driven to less educated healers for relief. Inability to secure the services of physicians when necessary and carelessness in diagnosis and treatment are probably the greatest complaints that are launched

against our profession today. The indiscretions committed by some "medical prostitutes" in the court room bring disgrace to the entire profession. The violations of the narcotic laws by a few have subjected us to unjust criticism. Excessive fees by some practitioners and unwillingness to discuss anticipated charges before care is administered have caused much dissatisfaction. Unethical practices among members of the profession bring contempt from our non-medical friends.

Fortunately in our society the violations and "indiscretions" are few and the number of offenders is small. But we must make an effort to eliminate the undesirable members and not defend them. The county medical societies have no place for these misfits. I have found that our membership, with few exceptions, is composed of the highest type practitioner who is venerated by his patients and respected by his non-professional associates. They are making a sincere effort to serve the sick and contribute to the health and welfare of the communities in which they live. Their noble efforts must not be destroyed by the unscrupulous few.

As a visual evidence that you enjoy membership in The Medical Society of New Jersey and as a reminder that you are available to render services to the sick at all times within their ability to pay for these services, the Public Relations Committee has prepared an attractive plaque which you will receive within a short time. Please display it in a prominent place in your office. Your patients will be happy to see it and they will have the assurance that they are being cared for by a well qualified and loyal member of our society.

"Public Relations in Medicine Means Personal Responsibility For You" is the slogan which originated in our society this year and is being used throughout the nation. See to it that you assume this responsibility. *The spotlight is on you.*

Harrold A. Murray, M.D.

ANNUAL MEETING CALL

The month of May invariably calls to mind the advent of balmy weather, the blossoming of spring flowers, and a family discussion about where to spend the summer vacation. It should also serve as a reminder to the members of this society that our annual meeting will soon be here. It will be held at Atlantic City, from May 17 to 20. Each annual meeting provides a variety of activities, scientific presentations, and social gatherings. The meetings of the House of Delegates offer a forum for the expression of opinions and policies of the individual county societies. The scientific meetings, which this year will be bigger and better than ever, help keep us abreast of the latest advances in medical science. And one must not forget the many luncheons, dinners and special events, which enable us to rub elbows with our colleagues from all over the state. Each annual meeting is a memorable event, and invariably a successful one for everyone concerned. This year, the House of Delegates will devote a special period to the discussion of various aspects of the Medical-Surgical Plan of New Jersey.

So plan now to attend our annual meeting, and enjoy yourself. It is still not too late to make a reservation at the hotel—and bring the family, they will enjoy it as much as you.

WORKMEN'S COMPENSATION LAW

Periodically, criticism is leveled at the administration of the New Jersey Workmen's Compensation Law. There is no doubt that since the adoption of this law the interests of the injured workman and his family have been protected and enhanced. Industry has come to recognize that the cost of workmen's compensation is an integral part of its production costs. The law, when first adopted in 1911, was imperfect but represented what appeared to be fair and just in the light of existing medical and legal knowledge of that day. Since then the law has been amended to keep pace with progressive social legislation and advancing medical knowledge. As an example, over twenty-five years ago medical experts testified that sudden death following an "unusual" effort was the result of an "acute dilatation of the heart". Later this term was no longer heard, and the term "coronary thrombosis" was substituted. Recently, since cardiologists and pathologists found it difficult to correlate the clinical effects of effort with the electrocardiographic findings and with the pathology found at autopsy, the medical expert has come to use new terms such as "coronary insufficiency, myocardial anoxia and infarction". Thus have the participants in the administration of the workmen's compensation law kept pace with the advances in medicine.

Prior to seven years ago, dermatitis arising out of employment was not compensable. Thousands of workmen and their families suffered serious losses because of this fact. This inequity was quickly appreciated and corrected following the enormous industrial expansion with an increased use of oils, solvents, chemicals, plastics, etc. One should not, because of the many contested claims of unrelated dermatitis, be discouraged nor lose sight of the tremendous good that this amendment has produced. A similar status prevails with other conditions in all medical specialties related to occupation and employment.

The etiology and pathogenesis of many industrial diseases are still indefinite. The existing knowledge of these diseases, the causal relationship of the industrial exposure, and the production of pathologic and physiologic changes are still obscure to many practitioners who are the first to see these patients. Too often the failure to obtain a detailed occupational history has denied a family the benefits of the existing law. Frequently an indiscriminate opinion relating an illness to employment has raised false hopes in a disabled worker, and placed an unnecessarily costly burden on the Workmen's Compensation Division.

Nowhere are members of the medical and legal professions so closely involved as in litigation of a workmen's compensation claim. It is the lawyer's function to present the facts, and proof that the disease or accident has arisen out of or in the course of employment. He must obtain from the interrogation of the medical witness three facts: (1) An intelligible, accurate diagnosis, (2) An interpretation and explanation as to how and why the employment was responsible for the disability, and (3) An estimation of the extent of disability with facts to support his conclusion. Let us assume the case of a man who was brought home from work with a pulmonary hemorrhage following moderate physical strain and whose chest x-ray showed some basilar fibrosis. How would you reply to these questions if you were testifying in behalf of one of your patients to whom this had happened? Would your answers be different if you were asked to testify in a similar case on behalf of the employer? How can the human equation be offset? The reading of the medical testimony in such a case in the light of these three factors proves interesting because

clinical criteria to measure partial permanent disability are non-existent and tax the "soul" of the physician to the extreme. Attempting just to pass judgment on the statements of the opposing physicians as to the aggravation of a pre-existing condition would try the wisdom of a Solomon.

In an effort to clarify these many complicated questions and enable the physician to become a more effective witness in the equitable adjudication of workmen's compensation cases, an all-day seminar (see page 157) on the New Jersey Workmen's Compensation Law will be held May 9, 1953, at the Rutgers Law School in cooperation with the New York University School of Medicine. If this seminar fills the need that is anticipated and receives the support of both professions, it will be expanded and conducted annually. This seminar should stimulate all physicians, lawyers and insurance officials to support it and should prove profitable to all concerned.

H.B.

MEDICAL RESEARCH IN NEW JERSEY

One of the criticisms frequently leveled against New Jersey medicine is that because we have no medical school, the opportunities for research here are limited. In the ten challenges presented by Dr. Murray to the General Session of the Medical Society on May 19, 1952, at Atlantic City, increased medical research was listed as challenge number five.

No one will deny that there is a need for more research in medicine as long as there is disease to plague the human race. However, a casual survey will rapidly dissipate the argument that opportunities for such research do not exist in this state. Considering first the basic, even preclinical sciences, New Jersey boasts three large, well established universities, all of which provide ample laboratory facilities for research in biology, chemistry, physiology, microbiology, et cetera. Many of the nations largest and most active pharmaceutical companies maintain plants and laboratories in New Jersey, and each of these, not to mention many of the smaller drug companies, is constantly engaged in research both basic and pharmacologic. In the field of clinical research, New Jersey has many large cities with ample clinical material and fine hospitals where groups of patients can be studied, evaluated, or statistically appraised with relative ease. In addition, there are many specialized institutions, such as tuberculosis, and psychiatric hospitals, which lend themselves admirably to research in the field of chronic medicine and long-term therapy. New Jersey's two Veterans Administration hospitals offer another fertile field for clinical research.

Not only is there ample opportunity for research in New Jersey, but this state has made many significant contributions to medical science, and today one can find active research going on in many locations throughout the state. The need, then, is not for greater opportunity to do research, but for a means of giving it a sense of direction and balance, a service ordinarily performed by a medical school. Some way must be found to bring together the basic research of the university and the hospital clinic. Pharmaceutical companies should be in close contact with local hospitals offering adequate clinic facilities for the testing of new drugs and therapeutic preparations. Research meetings should be held more frequently, so that investigators from various parts of the state may be kept abreast of problems being studied elsewhere, to insure a free interchange of

ideas and to add ferment to the research activities of each individual project.

Fortunately, steps in this direction have been taken, and as Dr. Murray stated in his message, a committee to look into medical research in New Jersey has been appointed. Its efforts will bring increase to us all.

SOLITARY LUNG NODULES

One of the most challenging diagnostic problems that confronts the physician is the solitary lung nodule. This lesion is usually silent and asymptomatic, and is detected most frequently when a chest x-ray is taken routinely, or for some other reason. Community and industry-wide surveys have brought a significant number of such nodules to the attention of the medical profession.

Isolated pulmonary nodules, often called "coin" lesions by the radiologist, assume major importance because a sizeable percentage of them are malignant. Like the finding of a hard mass in the breast or elsewhere in the body, until proved otherwise, such lesions must be considered malignant. The finding of such a shadow in a chest x-ray before symptoms arise forces the responsible physician to exclude the diagnosis of carcinoma.

Unfortunately, in the case of pulmonary nodules, the task is not easy. In a group of twenty-five patients whose chest x-rays revealed an isolated intrathoracic shadow, six were found to have bronchogenic carcinoma. The problem of differential diagnosis and available diagnostic technics is described in a recent discussion by Wolpaw.[1]

There is a variety of diagnostic means available for establishing the etiology of these puzzling pulmonary lesions. In addition to a careful occupational, geographic and tuberculosis contact history and a careful search for extra-pulmonary masses that may be more easily biopsied, special roentgenographic studies, skin testing, and bronchoscopy should be done. The laboratory can assist by examining the sputum and gastric contents for tubercle bacilli, fungi, and malignancy cells.

Special x-ray technics that may be helpful include laminagraphy or tomography, bronchography, angiocardiography, and serial x-ray observations. However, it is often dangerous to "observe" a patient for serial x-ray changes. Some bronchogenic carcinomas grow extremely slowly, and by the time a significant enlargement of the lesion is noted, it may have become inoperable. It is far better to rely on retrograde serial studies, that is to review previously taken chest x-rays when available and for as long back as possible, to determine the stability of the lesion in question.

If all the foregoing studies fail to establish beyond doubt the diagnosis of a benign lesion, resort must be made to exploratory thoracotomy. This may seem a formidable procedure, but thoracic surgery has made such great advances in recent years that the end justifies the means, for as is so often the case when dealing with malignant neoplasm, the best hope for cure is early and extensive resection.

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ORIGINAL ARTICLES

THE MEDICAL SOCIETY OF NEW JERSEY — ITS FIRST QUARTER CENTURY

Fred B. Rogers, M.D., Trenton, N. J.

1766 saw the founding of New Jersey's medical society, the first of its kind in America. This account summarizes the accomplishments of its first twenty-five years.

The medical profession in New Jersey inherits a rich legacy from the past. Its members can derive both knowledge and inspiration from the lives and contributions of their predecessors. Advances in medical education and practice date from the earliest days of The Medical Society of New Jersey, an organization which has the honor of being the first of its kind in America. A review of the achievements accomplished during the first twenty-five years of our Medical Society demonstrates how much its founders accomplished, in spite of colonial hardships, a war for independence and problems connected with the early years of a new nation.

In June of 1766 a notice appeared in the *N. Y. Mercury,* inviting interested physicians to attend a meeting which had as its aim the founding of a Medical Society for New Jersey. This notice announced that "A considerable number of the Practitioners of Physic and Surgery" planned "to form a Society for their mutual improvement, the advancement of the profession and promotion of the public good." To this end seventeen physicians met at New Brunswick on July 23, 1766 and established a body whose main purpose was to improve "the low state of affairs into which the practice of medicine has fallen." At this first meeting a fifteen-point proposal, entitled "Instruments of Association and Constitutions," was adopted. This document reaffirmed the precepts found in the Hippocratic Oath, emphasized the dignity and responsibilities of the medical calling and pledged the Society to promote medical education and combat quackery.

The new Society elected as its president the Rev. Robert McKean, rector of the Episcopal Church at Perth Amboy. (This was in keeping with the early history of the colony when healing was often in the hands of the local clergyman or schoolmaster. Of the thirty-six members of the Society during its first decade, six were pastor-physicians).

Soon after the organization of our Medical Society, a change for the better took place in medical education. One of the Society's first acts pertained to improving the preceptor-apprentice system of training customary at that time. This resolution ordained that "hereafter no student be taken as apprentice by any member unless he has a competent knowledge of Latin, and some initiation in the Greek." It was also agreed that "no member hereafter take an apprentice for less than four years, of which, three shall be with his master, and the other may, with his master's consent, be spent in some school of physic in Europe or America." The original members also gave immediate consideration to "the mode of charging for medical and surgical services." Prior to this time there was no uniformity in the colonies concerning compensation for medical care. A committee appointed at the first meeting drew up "A Table of Fees and Rates" to establish proper fees for the usual types of medical attention. The listed rates were acknowledged as maximal, not minimal, and a forceful preamble to this table explained that the physician should reduce his fees in accordance with the patient's ability to pay.

The value of accurate records was appreciated by this pioneer group of doctors. Their carefully kept minutes were the first such proceedings recorded in our country. (These *Transactions* for the years 1766-1859 remained in manuscript until 1875 when they were printed in one volume. The account of these meetings

has provided a storehouse of early medical information and still makes interesting reading). In 1771 the Society petitioned the Legislature to enact a bill "to Regulate the Practice of Physic and Surgery within the Colony of New Jersey." This bill was passed the following year and provided for the licensing of physicians by the Supreme Court following an examination before a board of qualified physicians. (In this country such legislation was preceded only by a similar act established in New York City twelve years earlier). It is of interest that the term "faculty" was used in the *Transactions* of 1769-1770 to denote the Society's members who composed a medical "college" with some rights resembling those of academic institutions today. (It was not until 1825, however, that the authority to award the M.D. degree was granted to The Medical Society of New Jersey, a right which may still be exercised according to its present Constitution!).

In its early days the Society often supplied written testimonials vouching for the character and knowledge of members moving from the colony. Such diplomas were presented in 1767, for example, to one member moving to Virginia and to another who was planning to travel in Europe. Alert to preserving a good reputation, the Society expelled several members during its first quarter century. Reasons for such action included "scandalous" behavior and failure to attend meetings. In 1774 a royal charter was sought to incorporate the New Jersey Medical Society. This was not obtained, however, due to the outbreak of the Revolutionary War. The title as adopted by the founders was the "New Jersey Medical Society." A later act (1790) incorporated this organization as "The Medical Society of New Jersey"—its present name.

On the death of its first president one year after his taking office, Dr. William Burnet of Newark was elected the second president. His inaugural address (delivered in Latin!) had as its subject, "The Use of the Lancet in Pleurisy." In 1771, Dr. John Cochran, the third president, presented the first dissertation discussed before the Society on the topic of catamenia. Semi-annual meetings were held at New Brunswick, Princeton and Burlington until the Revolution necessitated a six-year suspension of activities. From November 14, 1775, until November 6, 1781, no formal meetings were held, as one-half of the members were with the American Army.

When New Jersey became a battleground, its physicians rendered outstanding service, turning their attention to hospital organization and the training of more doctors to care for the sick and wounded. At least sixty-one New Jersey physicians saw military service. Dr. Burnet, the Society's second president, and Dr. Cochran, its third president, were the surgeons-general, respectively, of the Eastern and Middle Departments of George Washington's Army. One of the Society's members, Dr. Nathaniel Scudder (its fourth president in 1770) was killed in action. Reinforcing their importance as citizens is the fact that these early physicians held many public offices. Of the first one hundred members of the Society, seventeen served in Congress or the Legislature, seven were clergymen, five sheriffs, four judges, and one—Thomas Cadwalader—was the first Burgess (Mayor) of Trenton.

One month after the surrender of Cornwallis at Yorktown, the surviving members of the Society reassembled to resume regular sessions under the leadership of General John Beatty, a Revolutionary patriot. This occurred in 1781, the year in which the second state medical society, that of Massachusetts, was founded. Correspondence was soon in progress between these two groups, and later with the College of Physicians of Philadelphia, founded in 1787. Annual meetings of the New Jersey Society convened from 1781 until 1792 at either New Brunswick, Elizabeth, Perth Amboy or Princeton.

An increasing interest in clinical medicine is noted in the proceedings recorded following the war. At the session of 1784 it was noted that "a number of difficult cases" were discussed. Also in that year the original fee-table was ordered revised and its figures translated to the new currency. A special committee was appointed at this time to tell the people why it was in their interest to have such a schedule. This move was the germ of a public relations program, so vital for any medical organization. In spite of relatively small at-

tendance at meetings during the first twenty-five years, the Society's members displayed a wide interest in medical and civic affairs.

At the annual meeting in 1785, a seventeen-year-old boy was examined and all present advised surgery for removal of a tumor from the patient's forearm. A subsequent report told of his postoperative recovery, in spite of a complicating "lock-jaw." Other cases discussed during the next five years included Chorea Sancti Viti, Spina Ventosa of the vertebrae and femur, "hair-lip," "putrid fever" and other conditions bearing quaint diagnostic titles of that time. In 1787 Dr. Burnet presented the first scientific paper to be printed by a Society member. His subject was "On the Nature and Importance of the Healing Art." This article is still readable for its spirit of devotion to the highest principles of the medical profession. At this same session a committee was appointed to supervise all written proceedings in order to assure accuracy of the Society's permanent records. In the following year membership standards were raised when it was decided that at least three years' practice should be required before a candidate could apply for admission to the Society.

A distinctive seal for our Medical Society was first proposed at the yearly meeting in 1786. At that time a committee of three members was designated to supervise its design.



The present device dates from this initial proposal. Our seal depicts the oracle in the Temple of Apollo, the chief god of healing in antiquity. The high priest is shown delivering a prophesy as he stands beside the altar. Above him shines the light of inspiration. The Latin inscription above the columns, "Opiferque per orbem dicor," is a quotation from the poet Ovid. This is translated, "I am called the bearer of good works throughout the world." The motto on the altar is an abreviation for "Cortina merces anti." It may be translated, "The oracle of Apollo is opposed to commercialism" (Cortina being the technical name for this oracle). The inscription below the altar stands for "The Seal of The Medical Society of New Jersey."

On resuming its meetings following the Revolution, the Society renewed its plan to secure a charter for the purpose of consolidating its membership. After considerable deliberation such an instrument was obtained in June of 1790. The title of this charter was "An Act for Incorporating a Certain Number of Physicians and Surgeons of this State, by the Style and Title of The Medical Society of New Jersey." Fifty-one members subscribed to this document. Each of these physicians was to receive an ornate diploma (written in Latin) to establish his membership. In the following two years "Laws for the Government of The Medical Society of New Jersey" were adopted. These "laws" provided for continuation of the general annual meeting and effected a subdivision of the state Society into four smaller organizations. (District and county medical societies were not authorized until later, in 1816). It was also decided that each applicant for admission should deliver a dissertation on a medical subject, as well as stand examination before the members of the Society. After these requirements were met one could be voted into its membership. From this time, moreover, it was ruled that every member, in rotation, beginning with the eldest, must present a medical paper or describe an interesting case—such topic to serve as the subject for discussion at that particular meeting.

At the annual meeting held on December 6, 1791, Dr. Lewis Dunham of New Brunswick was elected the eighteenth president of the then twenty-five year old Society. By this time the pioneer efforts of its members had in large measure raised the standards of the medical profession not only in New Jersey but also throughout the United States. The present-day status of The Medical Society of New Jersey and its progressive attitude stem directly from the illustrious precedents established during the first quarter century of its life.

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NEW JERSEY SERVICE TO THE PHYSICALLY HANDICAPPED

HENRY A. BRODKIN,* M.D., Newark, N. J.

New Jersey's program for rehabilitating the physically handicapped has been active since 1919. A summary of the aims, methods and results of this program is presented with special reference to the economic and social benefits to be derived.

New Jersey was one of the first states in the country to enact a law for the purpose of rehabilitating the physically handicapped. This law, enacted on April 19, 1919, created the Rehabilitation Commission to provide rehabilitation services to the physically handicapped. "Rehabilitation" in the Act means to fit physically handicapped persons for remunerative occupation. "Physically handicapped" in the Act means any person who by reason of a physical defect or infirmity, whether congenital or acquired, by accident, injury or disease, is, or may be expected to be, totally or partially incapacitated for education or for remunerative occupation. The Commission consists of the Commissioners of Labor, Education, and Institutions and Agencies and five other members appointed by the Governor.

The major objective of the Rehabilitation Commission is to restore or improve the working ability of disabled persons through its program of vocational rehabilitation and physical restoration. Similar programs are operated by each state, assisted financially by the federal Office of Vocational Rehabilitation. "It provides medical examination, necessary medical, surgical, psychiatric and hospital services, necessary prosthetic devices such as artificial arms, and legs, hearing aids and braces, individual counseling, and guidance; vocational training in schools, on the job, by correspondence or tutor, placement assistance on the right job, job follow-up to make sure the worker is in a suitable assignment; necessary tools, equipment, licenses, and even maintenance and transportation during rehabilitation."

All men and women of working age with substantial job handicaps in the form of physical or mental impairment are eligible for this assistance. Such services are available not only to those with obvious disabilities, such as amputees, paralytics, spastics, et cetera. but also to those with unseen handicaps such as tuberculosis, emotional disabilities, deafness and heart disease. To be eligible a man or woman must be of working age, have a substantial job handicap because of physical or mental disability, and have a reasonably good chance of becoming employable or securing a more suitable job through the rehabilitation service.

The basic function of the Rehabilitation Commission is to provide physical restoration, counseling, training and placement. Let us assume that a client who has an employment handicap because of a physical defect applies to the Rehabilitation Commission for its service. The client is interviewed by a counselor

* Dr. Brodkin is Chief Medical Director of the Rehabilitation Commission of the State of New Jersey. This article is submitted under the auspices of the Advisory Committee on Rehabilitation to the Sub-committee on Public Health of The Medical Society of New Jersey.

assigned to his locality, who obtains a thorough knowledge of the client's circumstances, problems, aptitudes and ability. A comprehensive plan for rehabilitation is mapped out in cooperation with the client, and the client is shown how he can overcome the disability and achieve a satisfactory future for himself and his family. After this preliminary plan is decided upon and approved, the client is requested to have a general physical examination. This is similar to a life insurance examination and includes a urine analysis and serology. The commission pays five dollars for this examination. It was desired to have this examination made by the client's family doctor because he should be most interested in the successful outcome of the rehabilitation program of his patient. The family physician also would become a valuable adviser in recommending any additional professional consultation or diagnostic procedure to help determine the vocation that would be most suitable for the client. Unfortunately, this has not been very successful because some physicians are reluctant to fill out the form and fail to give an adequate prognosis. They have not grasped the purpose of the examination and do not describe adequately the physical defect or make the proper recommendation for improving the physical handicap. It was found that 30 to 40 per cent of the examination reports were worthless for these reasons. Some physicians who have had experience and knowledge of the rehabilitation service have provided excellent reports.

From the medical standpoint, the object of the physical restoration service is to bring the clients to the greatest degree of physical capacity. This may be accomplished in several ways. After the general physical examination it may be found necessary to seek consultation with a specialist or perform diagnostic tests or hospitalize the client to determine definitely his physical status. If an operation or treatment is necessary, the commission will pay the operative fee, the cost of hospitalization, nursing and convalescent care, if necessary, according to a fee schedule similar to that in use by the Veterans Administration. The commission has contracted with most of the recognized hospitals to pay an approved per diem rate. Up to ten days of hospitalization is authorized for diagnostic purposes, and up to ninety days of hospitalization is authorized for treatment of a physical defect. In addition, if an artificial limb or other orthopedic or prosthetic appliance is needed, this is provided by the commission subject to the approval of the client and the medical consultant.

In addition to the service of physical restoration, the commission provides training in a vocation or profession within the maximum limits of the physical and mental capacity of the client. If necessary the commission will contribute to the financial support of the client during the period of training. This training is provided either to prepare the handicapped person for a job or to train him for a better job. The training must be directed toward a definite job objective.

The fourth and final service is placement. Many industries learned the value of employing physically handicapped personnel during the war. They found that the physically handicapped, as a class, are more efficient and have a lower accident and absenteeism rate. Cognizant of their physical handicap, these employees are more anxious to please and prove that they can equal the output of their normal fellow employees.

Cases are not closed until it is definitely established that a client is not eligible or feasible for rehabilitation or until the client is happily functioning at a satisfactory job and has become self-sufficient.

During World War II there were approximately 17,000 major amputations among the armed forces. During the same period there were 120,000 amputations among the civilian population. The number of civilians with major amputations is conservatively estimated at 250,000 and is reported to be increasing at the rate of twenty-five thousand per year. These figures graphically show the magnitude of the problem without taking into consideration the millions who are handicapped by heart disease, tuberculosis, arthritis, deafness, blindness, cerebral palsy, epilepsy, etc.

There are two important reasons why more persons who are handicapped by orthopedic, pulmonary, cardiac, neurologic and ophthalmo-

logic defects do not receive the benefit of rehabilitation service. First, the profession as a whole, as well as the individual physician, is not aware of this important service that is available through the Rehabilitation Commission. Second, the social service and philanthropic agencies throughout the state that are engaged in certain phases of rehabilitation are not sufficiently coordinated to work through the Rehabilitation Commission.

CASE REPORT

H. T., male, white, age 26, was referred to the Rehabilitation Commission because of bronchiectasis with recurrent episodes of hemoptysis, cough and pain in the left chest. The client was assigned to a vocational counselor for an interview and application for service. At this time it was learned that the client had been left in an orphanage from the age of five until he was seventeen. He had completed two years of high school. For the past nine years he has been living with his older sister. He had served in the Navy for fifteen months and was discharged on a medical certificate. Client's work record was very spotty showing short periods of employment in light factory jobs. He was frequently discharged because of a pulmonary hemorrhage while at work. He was denied medical care by the Veterans Administration because of non-service connection. At the time of this interview he was unemployed but was attending school under the G. I. Bill.

He was referred for a general medical examination which showed no definite physical findings except for the presence of moist rales at the base of the left lung. He was six feet, one inch in height and weighed 148 pounds. He was sent back to the referring physician for a bronchogram. His report disclosed bronchiectasis of the left lower lobe and a recommendation for surgical treatment.

The vocational counselor prepared a plan for the admission of the client to St. Barnabas Hospital for surgical treatment. A left lower lobectomy was performed. The removed lobe showed a saccular purulent bronchicctasis with ulceration and dilatation of the bronchial walls. There were areas of pneumonitis irregularly distributed through the lobe which was somewhat fibrotic. The patient was discharged from St. Barnabas Hospital and was sent to a convalescent home for two weeks' care in June 1950. In August, 1950, he took a Civil Service examination and physical examination for a policeman's position, which he passed. He received his appointment to his local police department on October 16, 1950 at a salary of $2700 a year.

Follow-up contacts disclosed that client is now married and has been giving satisfactory service on his job, indicating a very successful rehabilitation service.

From a monetary point of view, the Rehabitation Commission spent $409 for the complete rehabilitation of this client. He now returns to the federal government, in income taxes alone, about $300 a year. Thus it can be seen that the rehabilitated client returns to the government many times the original cost of service, over a period of many years' gainful employment.

365 Osborne Terrace

CIVIL SERVICE MEDICAL OPENINGS

The United States Civil Service Commission has announced a new examination for medical officers for filling positions in various specialized fields of medicine, with salaries ranging from $5,400 to $10,800 a year. The positions are principally in the Bureau of Indian Affairs located on reservations west of the Mississippi River and in Alaska. A few positions may be filled in the Fish and Wildlife Service. Applicants must be fully qualified as doctors of medicine, and for most positions must be currently licensed to practice medicine and surgery in a State or Territory of the United States. Appropriate experience is required.

Further information and application forms may be obtained from the U.S. Civil Service Commission, Washington 25, D. C., or from most first- and second-class post offices. Applications will be accepted until further notice by the Board of U. S. Civil Service Examiners, Bureau of Indian Affairs, Department of the Interior, Washington 25, D. C.

THE HEADACHE PROBLEM

Sydney F. Smith, M.D., Highland Park, N. J.

Headache as a symptom is a problem for every physician, regardless of specialty. The author comprehensively describes the many types of headache, outlining the salient diagnostic and therapeutic features of each.

The headache problem is omnipresent, for nothing is more common than a headache. It is perhaps our best social alibi but also one of our worst diagnostic problems. To quote Louis Moench,[1] "The person with a headache often finds himself a medical orphan. He is fortunate indeed if the headache is transient, for otherwise he may find himself on an excursion to the ophthalmologist, otolaryngologist, neurologist, dentist, psychiatrist, osteopath and chiropractor. Thereupon he is x-rayed, massaged, analyzed, fitted with glasses, relieved of his turbinates and teeth and too often emerges with his headache intact."

Dr. Ogden[2] made an extensive statistical study of headache and his conclusions are extremely informative. Investigating about 6,000 cases representing a cross-section of the population of New Orleans, he found that 65% of these patients had headaches. He uncovered the following facts:

Allergy is extremely important in headache—for people who had hay fever, eczema, et cetera, had headaches twice as often as those without allergies. Twenty-nine per cent of the people with headaches reported a family incidence of headache. There is no seasonal incidence of headaches. Headaches are chiefly frontal. Seventy-eight per cent had no prodromata and 20 per cent had visual disturbances. Eight per cent had associated nasal symptoms.

Headaches were described as dull in nature or throbbing. Fatigue and eyestrain were blamed, and menses, in women. Headaches predominate in women and laborers have the lowest incidence. Headache decreases with advancing age—possibly due to vascular sclerosis. There is a higher incidence of headache in single people, and people with a college education are more prone to headaches than those with only a grammar school education.

Only 18% of headache sufferers seek medical aid. All others use aspirin, Anacin,® and other panaceas.

PATHOLOGIC PHYSIOLOGY

Wolff[3,4] and his associates have made remarkable strides in the clarification of this subject. We know now that there is no headache center in the brain, but that there are pain sensitive structures in the head which, on distention, traction, or pressure produce headache:

1. The scalp is sensitive.

2. The periosteum of the skull is most sensitive over the brow and lower occiput and least sensitive on the vertex.

3. All arteries of the scalp and dura, the basal arteries of the brain, and the great venous sinuses are sensitive. This vascular area is the most important of the above structures, for stimulation will not only produce a localized pain but occasionally nausea as well. If there is alternate stretching and relaxing, a throbbing pain will be produced. Tumors, abscesses, toxemia, and uremia produce headache by stimulation of these structures. Increased intracranial pressure, *per se*, is not a cause of headache but a decrease is. For example, papilledema may exist without headache.

The insensitive structures are the pia arachnoid, pacchionian granulations, cranial bone diploë, emissary veins; the entire parenchyma of the cerebrum and cerebellum and their vessels; the olfactory, optic, and auditory nerves; the third and fourth ventricles, choroid plexuses and aqueduct of Sylvius.

Headaches may be classified as follows:

1. Non-vascular — neurologic disorders, neuralgia, sinusitis, and uremia.

2. Vascular — migraine, tension, hypertension, Horton's cephalalgia, and temporal arteritis.

Headaches may also be classified according to the specialty treating the headache, such as nasal headache, ocular headache, allergic headache, orthopedic headache, hypertensive headache, et cetera.

It must be remembered that headache is only a symptom and is frequently present without any objective signs. Also, a person can have two different kinds of headache—*viz.*, migraine and fibrositis headache. History should mention location; duration; influence of emotion, fatigue, eyestrain; effects of food; presence of aura; family history of migraine, epilepsy, allergy; influence of menstruation and pregnancy; any associated nausea, vomiting, photophobia, nasal congestion, scotomata, paralysis, or paresthesia. If indicated, further neurologic investigations as electroencephalography, lumbar puncture, skull x-ray, et cetera should be done.

HEADACHES ASSOCIATED WITH NEUROLOGIC DISEASE

Tumors, meningitis, encephalitis, hematomata, and cerebral hemorrhages will be mentioned only as causes of headaches and their description left to the neurologist. Actually, only five per cent of headaches have an organic intracranial basis.

SPINAL PUNCTURE HEADACHE

This may occur in 5 to 30% of cases. It is due to a leaking of spinal fluid through the punctured hole in the dura, producing a lowering of cerebrospinal fluid pressure with traction on the pain sensitive structures in the head. It may come on within a period of one hour to several days, and is frequently occipital or bifrontal, but may be anywhere. It is worse on being up and about and is relieved when lying down. There may be associated nuchal rigidity, aggravation of headache by rapid headshaking or jugular compression, and partial relief by use of abdominal binders.

Prophylaxis and Treatment:

Always use the bevel of a spinal needle facing one side of the patient, so as to separate the longitudinal fibers of the dura minimally and avoid cutting them. Becton-Dickinson makes a 20 gauge pencil-point or round pointed needle, which only separates the fibers and allows them to return to their original state when it is withdrawn.

In clinics, patients should dress immediately and not lie down too long.

Therapeutic measures include:

Ergotamine tartrate in increasing doses — 0.25 mg., subcutaneously, gradually increasing to 0.5 mg.

Prostigmine,® orally or by injection.

Caldwell [5] suggests 1.0 cc. Dihydroergotamine Tartrate ® intravenously plus caffeine sodium benzoate intramuscularly.

Peridural saline injections to produce a splinting head of pressure, in an attempt to prevent leakage long enough for a fibrin seal to develop.

Subarachnoid injections of physiologic saline solution up to 50 cc. to restore cerebrospinal fluid pressure.

Nicotinic acid, 50 to 100 mg. orally four times a day.

POST-TRAUMATIC HEADACHES

Treatment in these cases is difficult, because of their variety and complexity and their frequent misuse by malingerers. Penfield and Drayton felt that adhesions are to blame for the symptoms; they remove ventricular fluid and inject air into the subdural spaces to break up the adhesions.

Prostigmine,® 1:2000, may be used in 1 cc. doses intramuscularly twice a week, plus Prostigmine Bromide ® tablets, 15 mg., three times daily. The mechanism is to inhibit the action of cholinesterase, permitting acetyl choline to produce vasodilation.

Additional measures consist in sodium and water restriction, local Novocain,® and psychotherapy.

CRANIAL NERVE NEURALGIAS

The most common is trigeminal neuralgia or "tic douloureux." Others of importance, but not as common, are neuralgias of the facial, glossopharyngeal, intermediate, vidian, sphenopalatine and geniculate nerves.

Trigeminal neuralgia may be caused by an organic abnormality as tumor, (60% according to Dandy [6]) but frequently no cause can

be determined. Grant found that hypertension and arteriosclerosis were frequently associated disorders, especially in men of somewhat effeminate type and in women of the masculine type; also there was a 20% family history of migraine. It is most common from 35 to 60, of equal sex incidence, and chiefly right sided; it involves the maxillary division more often than the other branches. The pain is unilateral, sudden, paroxysmal and progressive, exquisitely severe, lasting seconds to minutes and recurring indiscriminately. The patient may refuse to shave, eat, or wash his face for fear of stimulating trigger areas that are so characteristically found in this illness. Occasionally, there may be flushed skin, conjunctivitis, and excessive salivation as well.

Treatment:

Trichlorethylene affords quick but temporary relief. Nerve block with alcohol will afford about one year's relief and each subsequent block will be less effective; ultimately, one may have to resort to a retrogasserian neurectomy. Sequelae are anesthesia of the area involved, trophic ulcers, facial asymmetry, and if the motor divisions are involved, paralysis of the masseter and pterygoid muscles. Occasionally electric shock may be of value. Recently vitamin B_{12}, 1000 mcg., daily for five to ten days, has been recommended.

SPHENOPALATINE NEURALGIA

The pain is localized about the root of the nose, eyes, upper jaws and teeth extending backward to the ear and occiput. It may be cyclic or constant. Treatment consists of large doses of thiamine chloride and cocainization of the ganglion. The latter serves as a diagnostic tool as well. The ganglion lies just behind the posterior tip of the middle turbinate and is easily reached.

VIDIAN NEURALGIA

This is similar in location to sphenopalatine neuralgia and differentiation is made by cocainization of the ganglion. Treatment of sphenoid sinusitis is of considerable value.

GLOSSOPHARYNGEAL NEURALGIA

This is very uncommon. It is brought on by eating, swallowing, or chewing, whereby the trigger areas are stimulated. It involves the area of the root of the tongue to the throat, ear, and neck. Treatment is by local cocaine or section.

PRIMARY ATYPICAL FACIAL NEURALGIA (GLASER)

Seen chiefly in women, this is bilateral in two thirds of cases and follows a vascular rather than a nerve distribution. No trigger zone exists, but cold, heat, eating, fatigue, worry, or menses may bring on attacks. The pain is aching in type, throbbing, and in 50% of cases is associated with ocular disturbance, lacrimation, edema, flushing, nasal discharge, and edema of the face. The pain is usually continuous and may last hours to days.

Treatment:

Histamine desensitization is most effective. Occasionally Benadryl ® and migraine remedies may be used successfully.

We must not lose sight of the fact that an impacted wisdom tooth may produce a real facial neuralgia and its removal will cure the patient. Overriding of the temporomandibular joint from the loss or wearing down of molar teeth, diseases of joints of the jaw, and dental abscesses may produce similar neuralgias.

HEADACHES OF OCULAR ORIGIN

This headache is associated chiefly with eye strain, comes on after excessive reading or sewing and occurs at the end of the day. It may be produced also by holding the head in certain positions that produce an occipital myalgia.

HEADACHES OF NASAL ORIGIN

Sinusitis is common but certainly not every headache is due to sinusitis. It is not a very common cause of headache. The close proximity of the nose and forehead has contributed to this illusion; so much so, that if a patient complains of a headache it is probable that he will have nasal tampons applied before he can state the type of headache. The sinuses themselves are relatively insensitive to pain but the ostia and nasal mucous membranes are very sensitive. Therefore, if no relief is obtained by shrinkage or anesthesia of the nasal mucous membranes, sinusitis is probably not the cause of the headache. The pain of acute sinusitis is constant or periodic, sharply localized, pres-

ent on arising, and usually subsides spontaneously in the afternoon, leaving a feeling of fullness. It is aggravated by stooping, exertion, jarring, sneezing, and coughing. Maxillary sinusitis pain is referred to the frontal area, chin, and upper jaw with local tenderness over the maxillary sinuses and tenderness of of the upper teeth on chewing. Frontal sinusitis refers pain to the frontal area. Ethmoid sinusitis refers pain to the root of the nose if the anterior chambers are involved and to the temporal area, front teeth and parietal area, if the posterior ones are involved. The sphenoid sinus refers its pain to behind the eyeballs, to the vertex, behind the mastoid processes and is frequently associated with severe dizziness on stooping.

VACUUM FRONTAL HEADACHE

Its existence is subject to question. Supposedly, it is caused by an obstruction of the naso-frontal duct with absorption of air and transudation of fluid into the cavity.

NASAL OBSTRUCTION

Acute coryza, polyps, or allergic mucosal reactions may produce headache, and treatment is related to the cause.

HEADACHES FROM PATHOLOGY OF NECK AND SCALP

These are common and make up about ten per cent of all headaches. Occipito-nuchal pain may occur in cervical arthritis, occipital neuralgia, myositis or fibrositis of nuchal muscles and psychoneurosis. Fibrositis of the nuchal area is far more common than generally realized and may be diagnosed by the presence of spasm and nodules at the insertion of the posterior neck muscles into the superior nuchal line of the skull. Also, pressure on these nodules reproduces the pain. X-ray frequently reveals a loss of the lordotic curvature of the cervical spine and this type of patient will find comfort by keeping his head forward with chin in hand. This condition may, according to some authors, be directly attributed to allergy,[7] e.g., house dust, while others feature the element of psychoneurosis. Treatment may be local heat and massage, use of a cervical collar, histamine ointment and local Novocain® injections, or general: histamine desensitization or histamine iontophoresis, nicotinic acid, 100 mg. orally twice a day, or psychotherapy.

The pain of cervical arthritis is more acute, recurs more frequently, and finally becomes permanent. The mechanism is compression of nerve roots by narrowing of intervetebral foramina owing to the thinning of the intervertebral spaces. It may awake the patient from sleep, as opposed to the above type. Tension, drafts, and excessive motion may bring on attacks but bending the head backward will provide relief. Usually arthritis is present elsewhere and x-ray confirms the diagnosis. Treatment is that of arthritis in general, particularly, x-ray therapy.

HEADACHES FROM SYSTEMIC DISORDERS

Gastro-intestinal headaches — colonic stasis with auto-intoxication is passé. Probably the headache is psychogenic, associated with spastic constipation.

Achlorhydria may contribute to headaches either because of the associated anemia, or absorption of an allergenic protein molecule.

Acute infections and fever produce toxic headaches.

Uremia produces headache characteristically.

Hypoglycemia produces headache. Treatment recommended is frequent feeding and a high protein diet.

Polyarteritis nodosa of temporal arteries produce prolonged unilateral headache. Treat with local Novocain.®

Orthostatic headaches accompany a sudden change in posture and are usually associated with a feeling of exhaustion. Both symptoms disappear during the day. Syncope, deficient sweating, and polyuria when recumbent are common. Diagnosis is made by history and the Flack test. In this test the patient blows up a sphygmomanometer to 40 mm. and holds it. Normally, one can sustain this pressure level for 25 seconds, but the patient with poor venous return gets a headache, tachycardia, faints, and collapses in about 10 seconds. On standing suddenly the blood pressure drops sharply and the pulse rises rapidly. Treatment is by moving slowly, raising the head of the bed, and prescribing ephedrine, Benzedrine,® or caffeine.

Hypothyroidism may cause headache.

Nitroglycerine headaches are frequent and

best treated with caffeine, Benzedrine,® and Prostigmine.®

Arteriosclerosis headache is treated specifically with 50 mg. of nicotinic acid with 5 grains of aspirin, repeated every two hours as needed.

Hypertension will produce headaches, usually in an emotionally tense individual. Hypertensive headaches are curiously not related to the height of the blood pressure. It is felt typically in the early morning and tends to disappear after breakfast with activity. It is chiefly occipital, but may be migraine in nature. Probably two factors are in play here:

1. Cerebrovascular tone with distention of blood vessels—as in migraine. This type responds to the ergotamine therapy of migraine, but Octin® is to be avoided.

2. Contraction of cervical muscles due to emotional tension. This type responds to analgesics and sedation as codeine, aspirin, and barbiturates.

Other headaches can occur, such as those associated with blood disorders, poisons, and noxious gases.

HISTAMINE HEADACHE OR HORTON'S CEPHALALGIA[8]

This is uncommon, 0.1% of all headaches, but it must be recognized, for cure depends on its recognition. These headaches occur in later life, after 40 years of age, are hemicranial, and of short duration (less than one hour), occur in periods of days or weeks with remission between, awake the patient at night typically and have no prodromata. The pain is confined to the distribution of the external carotid artery which is exquisitely tender. The pain itself is excruciating, constant, and so severe that it has been called "suicide headache." It involves the eye, temple, neck, and face on one side, causes ipsilateral lacrimation and nasal congestion, swelling of the temporal vessels with flushing of one side of the face and perspiration on that side. There are no trigger areas and no associated gastro-intestinal symptoms. Remissions occur spontaneously. This type of patient has usually made the rounds, and has had all kinds of therapy. Forty per cent have had extensive surgery involving the nose, teeth, and sympathetic system.

The patient may not be seen in an attack, but if the history is suggestive, it can be reproduced easily and the diagnosis established. Using 0.4 cc. of 1:1000 dilution of histamine acid phosphate or 0.35 mg. of histamine base, inject 0.1 cc. intravenously slowly. If no headache occurs, inject the other 0.3 cc. An immediate reaction, as flushing and headache, is from histamine and occurs in normal individuals. The true histamine cephalalgia comes on 15 to 30 minutes later and is pathognomonic. Nitroglycerin, 1/50 grain sublingually, will also produce an attack. The attack can be promptly stopped by Dihydroergotamine Tartrate,® 1cc. intravenously or 1:500,000 Adrenalin,® 1.0 cc., also by vein.

Treatment:

1. Temporary relief may be obtained by assuming an erect posture or by compressing the carotid artery. Intravenous epinephrine 0.1 cc., 1:100,000 solution, or immersion of the hands in cold water may also stop an attack.

2. Specific therapy is desensitization with histamine. Horton's technic uses histamine diphospate in 1 cc. ampoules containing 0.275 mg. equal to 0.1 mg. of histamine base. Start injections subcutaneously of 0.05 cc. Give a second injection six hours later and increase the amount daily by 0.05 cc. until 0.5 cc. is reached. Occasionally, if the case warrants it, the dose may go to 0.75 or 1.0 cc. of 0.1 mg. of histamine base. Ten days to three weeks, according to tolerance of the patient, may be required before relief is obtained, and in some cases, a maintenance dose is required for one to three times per week for varying periods of time. If severe headache occurs, cut the dose in half and increase more gradually. Horton[8] claims 95% success with this technic.

3. A less satisfactory method is a slow intravenous infusion of 1,000 cc. of one millionth dilution of histamine (1 cc. of 1:1,000 dilution histamine acid phosphate in 1 liter of normal saline). This must be slow and take three hours or more. It is done weekly, then monthly.

4. Antihistamine drugs, particularly Benadryl,®[9] occasionally give relief. Pyribenzamine® and others are not effective here.

5. Louis Moench[1] feels that there is a relationship between histamine headaches and

duodenal ulcer and he routinely prescribes Amphojel® with relief of headache. Conversely, he treat duodenal ulcers with histamine desensitization.

6. Dihydroergotamine Tartrate® will stop an attack in one to five minutes if given intravenously.

7. Inhalation of oxygen occasionally helps.

8. Nocturnal attacks can be prevented by rectal suppositories of 2 mg. of ergotamine tartrate and 100 mg. of caffeine at bedtime.

9. Cortisone and ACTH are useless as specific therapy, but are valuable because if the response of the patient is unsatisfactory, cortisone can be given for a few days, and then histamine again, and the patient is more easily controlled.

TENSION HEADACHE

Like histamine headache, this too is a vascular headache. It makes up the largest group of vascular headaches. This headache is poorly defined, occurs days to months at a time, is described as band-like, vise-like, heavy weight or pulling sensation, and is chiefly occipital but may be generalized. It usually has no other features except an associated psychoneurosis. It develops, as a rule, during or following bouts of nervous tension. Like migraine, it involves constriction and dilatation of cranial arteries, but there are no prodromata, no heredity factor and no gastro-intestinal symptoms.

Treatment:

Sedation, avoidance of stimulants as alcohol and tobacco, psychotherapy and in severe cases, Cafergot,® or nicotinic acid intravenously. Most effective of all is Dihydroergotamine Tartrate® by vein. Recently, Fiorinal® orally has been used with good results.

MIGRAINE

Incidence: Two to eight million people in the United States. It makes up about 13% of all headaches and is said to be present in 10% of all patients in a general practice. It occurs chiefly in women—two and a half times more than in men, and is present particularly throughout normal menstrual life, being absent during pregnancy and frequently absent after menopause, although the aura may remain. Most cases start between 16 and 35 years of age with one half starting between the ages of 20 and 30. Country dwellers and manual workers have less migraine than city dwellers and mental workers. Fifty per cent of the children of parents with migraine develop migraine. There is some family history of epilepsy. It may be a recessive characteristic.

Psychic factors are important in migraine but they are not prime factors. There are many theories as to etiology; however, the theory that allergy is a causative factor is standing up best today. Schwarz, Unger, and others are strong proponents of this theory. Actually, there is some common allergic disorder in 40% of the immediate relatives of migraine patients. It has been shown fairly conclusively by a group of allergists that the precipitating factor is almost always a food—usually in order of importance, chocolate, milk, wheat, pork, eggs, fish, coffee, onions, tomatoes, nuts, and beef. We know the cyclic vomiting in children is usually a food allergy and this is frequently a precursor of migraine. Actually the causative factor is difficult to determine, for skin tests are not reliable when it comes to testing food allergies.

We should resort then to good diaries or Rowe tests[10] or the elimination diets of Alvarez, using lamb, pear, and rice. Utilizing these methods it will become apparent quickly that when certain foods are eliminated, patients will improve. Hartsock[11] obtained 30% complete relief, and partial relief in 75% of his migraine cases and Unger in 60% just by avoiding certain allergens.

It is said that prescribing dilute hydrochloric acid or bile salts may aid by the complete digestion of proteins and so prevent absorption of any allergenic protein molecules. Goltman showed the presence of cerebral edema in migraine, and this favors the allergic theory.

Wolff[12] and others have recently revealed evidence confirming the vasomotor theory, although this may be associated with food allergy. The pathologic physiology was shown to be an increased amplitude of pulsation (or dilatation) in the temporal artery or branches of the external carotid artery, and the efficacy of the ergot preparations depends on their ability to reduce this amplitude. The prodromata are due to cerebral vasoconstriction

of branches of the internal carotid artery with resultant anoxia of occipito-cortical function, producing speech disorders, confusion, paresthesias, and scotomata. Amyl nitrite can abolish the scotomata.

It is interesting that migraine is five times more common in hypertensives and this may be important, for actually they have a temperament similar to normotensive migraine sufferers—ambitious, hard driving, obsessive, meticulous, perfectionist, and inelastic. Possibly, one is an offshoot of the other.

Migraine may occasionally be associated with organic diseases of the central nervous system, as brain tumor, encephalitis, cerebrovascular accident and epilepsy. It is interesting that epilepsy is twelve times more common in migraine patients than in normals. Care should be exercised in making a diagnosis.

The pain itself in migraine is transmitted to consciousness by way of the fifth, ninth, and tenth cranial nerves and upper three cervical nerves.

Types of Migraine:

1. The routine one commonly seen is hemicrania simplex.

2. Ophthalmic migraine—before, during or after a headache visual disturbances occur. Here refractive errors should be corrected.

3. Ophthalmoplegic migraine is rare. It is characterized by paralysis of eye muscles lasting two to ten days, but may be permanent. It is unilateral and usually involves the third nerve and rarely the fourth and sixth. Diplopia, myosis, and ptosis occur, and scotomata occasionally. Frequently, the paralysis may not occur until one to seven days after the headache and suggests that the paralysis may be due to vasodilatation and compression of the oculomotor nerves. Some believe this type more often has an organic basis and actually brainstem lesions and aneurysms have been found to be responsible.

4. Facioplegic migraine is a rare type associated with Bell's palsy.

5. Abdominal migraine may occur without headache. It is probably due to over-irritation of the vagus nerve. Symptoms may be referred to any viscera, e.g., dyspnea, abdominal pain, nausea, diarrhea and polyuria.

6. Migraine equivalents—e.g. cyclic vomiting in children. These children have cyclic attacks of peculiar, unexplained fatigue, irritability, nausea, vomiting, and anorexia and abdominal pain. Usually, there is no headache component until after puberty.

Diagnosis of Migraine:

We must not forget that cerebral aneurysms and brain tumors may masquerade as migraine and therefore a careful differential diagnosis must be made.

True migraine is a symptom complex and not a disease entity. It may vary from person to person but for one individual it is usually stereotyped. It is incapacitating, periodic, preceded by visual scotomata in ten per cent, and culminates in nausea and vomiting. As a rule it occurs against a background of apparently perfect health. It is usually gradual but may be sudden in onset.

Four-fifths of cases are hemicranial at some time but may become bilateral and spread into the shoulder. It is throbbing in nature and any sensory stimulus aggravates the pain. There is always prodromata of fatigue or malaise hours to days before the attack and this is followed by a brief symptom-free interval. Associated symptoms may vary, as hyperacusis, paresthesia, lacrimation, edema, fever, olfactory hallucinations, agitation, visual disturbances, cranial nerve palsies, pains in chest and abdomen, diarrhea, salivation, perspiration, twitching, aphasia, vertigo, and even paralysis. The attack lasts fifteen minutes and may last up to ten days, but the average duration of the attack is pretty constant for that individual.

Clinically,[13] for diagnostic purposes, we can reproduce a migraine attack by giving a migraine individual nitroglycerin, 1/50 grain, sublingually, for nitroglycerin acts chiefly on the external carotid branches.

Treatment:

Prevention: Avoid nervous, and emotional strains, correct eyesight, avoid food allergens, maintain a good regularity of exercise, rest, sleep, and bowel habits, and use ascorbic acid, 100 mg. three times daily. If vascular disease does not allow specific therapy, do a ligation or periarterial infiltration of the artery in the re-

gion of the headache. Treat any anemia, thyroid disease, or menopausal symptoms.

Therapy: In severe cases keep the patient in a quiet, dark room with an ice bag over the area of pain.

One-quarter of patients are helped by the allergic approach.

Psychotherapy is of invaluable aid, for by learning to avoid precipitating factors as anxiety and overwork, the patient is improved.

Potassium thiocyanate is excellent treatment. Hines and Eaton reduced the frequency of migraine attacks by 25%, but blood levels had to be kept at 2.5 to 8 mg. per hundred centimeters.

Thiamine chloride daily has value according to some.

Riboflavin 5 mg. orally three times a day similarly has been recommended.

Nicotinic acid or sodium nicotinate 100 mg. in my hands (and also in those of Goldzieher and Popkin [14]) afforded prompt relief in a majority of cases. Atkinson prefers giving several doses intravenously in increasing doses of 25 mg. to 50 mg. and then intramuscularly and orally. It has been used with good results also in malarial headache, sinusitis, hypertensive and spinal tap headache; Moench,[1] on the other hand, feels the flush is valueless.

Inhalation of trichlorethylene is effective in some cases.

Inhalation of 100% oxygen, 7 liters per minute for one to two hours will relieve 80% of migraine headaches but only if given early.

The drugs of choice, however, are the ergot preparations. But one must follow two rules:

1. Treat early—for the later, the less effective.

2. Do not give orally if nausea is present.

Ergot preparations are 90% effective in migraine and yet, after 25 years of use, they are still unknown to many. The effect is directly on the blood vessels by reducing their amplitude of dilatation.

1. Gynergen® or ergotamine tartrate. It comes in ampoules of two sizes—0.5 cc. containing 0.25 mg. and 1.0 cc. containing 0.5 mg. It is best given in doses of 0.25 mg. intravenously for quickest effect. Never give more than 0.25 mg. in one dose or more than 0.5 mg. in one day.

Subcutaneously give only 0.5 mg. and no more than twice a day.

Orally 1 mg. tablets are less effective. Give one tablet every hour up to a total of five (limit of ten per week); some give three to five at once followed by one each half-hour to a total of eight.

Rectally—2 mg. with 0.4 mg. atropine in a suppository, one each half-hour to a total of three.

It is interesting that there is no increase or decrease in the patient's susceptibility and once relief is obtained with one dose he will always get relief with the same dose.

2. Ergonovine is weaker but safer; use it particularly if there is a reaction to Gynergen® or if the patient has parenthesias following the use of Gynergen.® The dose is 0.2 mg. by injection.

3. Dihydroergotamine Tartrate® — ampoules of 1 cc. containing 1 mg. Dose is 0.5 to 2.0 mg. subcutaneously, intravenously or intramuscularly. It is very effective and has one-quarter the toxicity of Gynergen,® so that it may be used in pregnancy, but very cautiously.

4. Cafergot® = 1 mg. ergotamine tartrate plus 100 mg. caffeine. It is very effective orally, two tablets at the first sign of an attack and one tablet every half-hour to a total of six, if necessary. If nausea occurs, a rectal suppository of 2 mg. ergotamine tartrate and 100 mg. of caffeine may be used.

It is a good point to limit coffee in these individuals for if they develop a tolerance to caffeine they get less effect from Cafergot.®

Contraindication to ergot remedies:

1. Septic states.

2. Pregnancy.

3. Obliterative vascular disease, especially of the coronary vessels.

4. Incipient ergotism—any cramps, nausea, or vomiting after the use of ergot preparation will be relieved by atropine.

Dramamine® has helped the occasional case.

Octin® has its use for it too acts as a vasoconstrictor. The dose is 100 mg. intramuscularly or orally one tablet every 30 minutes until relief is obtained; but give no more than four

in toto (each tablet contains 120 mg). It produces a transient rise in blood pressure and so should be avoided in hypertension. Occasionally, in a case that does not respond to Dihydroergotamine Tartrate,® but develops excessive hypertension to 100 mg. of Octin,® 50 mg. of Octin ® and 1 mg. of Dihydroergotamine Tartrate ® may be used together effectively.

Histamine or Hapamine ® subcutaneously are used in migraine, rather frequently too, but they are not the drugs of choice. Subcutaneous doses of histamine are given according to this schedule:

0.05 mg. twice a day for two days
0.066 mg. twice a day on third day
0.08 mg. twice a day on fourth day
0.1 mg. twice a day for two to three weeks.

Intravenously 1 mg. of histamine[15] base in 500 cc. isotonic saline may be given slowly, five drops per minute, giving Amphojel ® orally at the same time. Adrenalin ® and ascorbic acid for any excessive urticarial response are kept at hand. Hapamine ® may be used, starting with 0.05 cc. and gradually increasing to 1.5 cc. every 3 to 7 days. However, it is not approved.

Codeine and aspirin may be effective in mild cases, but Demerol ® and morphine are condemned because of the danger of addiction.

Intravenous calcium gluconate has an excellent effect on the residual headache—apparently due to muscle spasm. Some recommend using it first by vein and following with ergotamine intravenously.

Sedation is of value. A three grain Nembutal ® suppository may stave off an attack and the patient can sleep it off, or Bromural ® orally may be used in mild cases. If there is excessive nausea and vomiting, use Sodium Amytal ® 0.25 to 0.5 gram intramuscularly.

Estrogen, Antuitrin-S,® progesterone, and Pituitrin ® have been used to little avail. Estrogens may be of some slight value in allaying vasomotor irritability, particularly in those cases where migraine is associated with the menstrual period.

Typhoid vaccine to raise temperature to 103°, Adrenalin,® ephedrine, Prostigmine,® calcium lactate, Benzedrine,® potassium chloride, urea, Decholin,® theophylline all have their advocates, but none is particularly good.

Ligating the temporal or middle meningeal artery, cervical sympathectomy and cerebral decompression all give poor results.

Insulin to produce a mild insulin shock is effective in stopping a migraine headache, according to Tillim, who uses 10 to 50 units of regular insulin.

In prostrated cases, with excessive nausea and vomiting, glucose and saline infusions should be used to prevent dehydration.

O'Neill at the Lahey Clinic, claims effective use of Benadryl.®

Some have used ethyl chloride spray effectively.

Probably the latest and, to my mind, the best is the use of a new but as yet unreleased product. Dr. Ryan,[16,17] in Missouri, felt that Cafergot ® was not complete. It lacked an antispasmodic and so he suggested adding Bellafoline ® to relieve smooth muscle spasm and control hypersecretions, as well as to counteract the gastric effect of ergotamine. He felt that a sedative should a'so be added to combat the emotional tension. Accordingly, he uses a suppository containing 2.0 mg. ergotamine tartrate, 100 mg. caffeine, 0.25 mg. Bellafoline,® and 60. mg. pentobarbital sodium. He reports tremendous success with this product in all types of vascular headaches.

Despite all the medication cited above, we still have occasional failure, and these must be attributed to: 1. multiple causes; 2. emotional stress; 3. medication given in insufficient dose or not early enough; 4. lack of recognition of the residual muscle spasm.

Therefore, if our efforts fail, we must review our diagnosis and attempt to correct any deficiencies.

SUMMARY

The problem of headache has been reviewed. Proper diagnosis has been stressed because of its close relationship to treatment.

Treatment has been reviewed in detail, and stress laid on the value of ergot preparations in the vascular types of headache.

402 Raritan Avenue

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POSTGRADUATE COURSE IN ALLERGY

The American College of Allergists announces its Ninth Annual Congress and Postgraduate Course in Allergy, to be held at the Conrad Hilton Hotel in Chicago, April 24-29. The program includes a survey of physiologic and pathologic aspects of allergy, bronchial asthma, allergy of the eye, ear, nose and throat, dermatologic allergy, and a consideration of the newer therapeutic methods.

For detailed information write The American College of Allergists, La Salle Medical Building, Minneapolis 2, Minn.

STREPTOMYCIN BIBLIOGRAPHY

Dr. Selman A. Waksman has prepared a completely indexed bibliography covering almost 6,000 papers written about streptomycin. This volume, entitled "The Literature on Streptomycin 1944-1952," contains a brief listing of references concerning actinomycetes and streptothricin. The major portion of the book lists references to streptomycin. It is published by Rutgers University Press, New Brunswick, from whom it may be purchased at $5.00 a copy.

PHILADELPHIA MEDICAL SOCIETY INSTITUTE

The Philadelphia County Medical Society will hold its annual Postgraduate Institute at the Bellevue-Stratford Hotel, April 28-May 1. There will be panel discussions on geriatrics, endocrinology, liver disease and a variety of other topics. There is a registration fee of $10 for non-members of the Society.

TOWARDS BETTER SCHOOL HEALTH EXAMINATIONS

Neil Castaldo, M.D., Cranford, N. J.

A positive program for the detection and correction of remediable defects in school children is described.

For many years, school health examinations have been carried out by school physicians by the so-called "one minute inspection and examination" method. Reasons for this hurried type of physical examination were: (1) lack of time, (2) too many children to be examined, (3) failure of boards of education to supply sufficient funds, (4) lack of interest by school personnel and parents, (5) the ban on having the children undress, and (6) the subtle derision from colleagues with which the school physician has to contend relative to children excluded from school for some reason or other.

Today all this has changed, perhaps because of the effective efforts of Parent-Teacher Associations. However, although the method of making school examinations has improved, the procedure is still far short of the ideal. Today, in most schools, we do strip children to the waist. We examine only specified grades. Public interest has been stimulated. Still, the results fall short of expectations.

The original premise of requiring an examination of every child in the district is outmoded. When this is the rule, the school physician examines mostly normal children, who need no special care or attention. They are then listed as "normal" on the school health card; nothing more is achieved. On the other hand, the children who *are* abnormal suffer from lack of time and energy which have already been expended on the normals.

The school physician should spend most of his time examining children referred to him by the ones who know them best: their teachers. The teacher should refer the child to the school nurse for what she considers an abnormality. The school nurse then can arrange with the school physician for the examination of this child. A provisional diagnosis and recommendation should be given by the school physician. Follow-up by the school nurse is advisable and desirable. In this way, sick, abnormal and retarded children really would be helped on the road towards their proper place in the classroom. My suggestion for a dynamic and effective school health program is:

1. All pre-school children should be examined thoroughly by the family physician. Abnormalities should be noted, as well as recommendations appropriate to restoring the child to normal.
2. All preschool children should receive inoculations against diphtheria, whooping cough and tetanus, as well as vaccination against smallpox.
3. Children who appear to the teacher to have a physical or mental defect, or who seem ill, should be referred to the school nurse. These children should then be examined by the school physician.
4. The school physician, after the examination, should make a provisional diagnosis and recommend treatment by the family physician.
5. Follow-up should be done by the school nurse to show parents the need for action to restore health, correct abnormalities or initiate treatment.

103 Lincoln Avenue

CLINICAL INVESTIGATION OF THE ORAL MERCURIAL NEOHYDRIN® OVER A ONE YEAR PERIOD.*

William Leff, M.D.,† and
Harvey E. Nussbaum, M.D.,‡ Newark, N. J.

Twenty-eight of 33 cardiac patients in congestive failure were managed successfully with Neohydrin® in place of mercurial diuretic injections. Pharmacology, dosage, therapeutic activity and toxicity of this new preparation are described.

A clinical study was undertaken to evaluate a new oral mercurial diuretic, (3-chloromercuri-2-methoxypropylurea) now known as Neohydrin.® Laboratory investigation [8] showed that this new oral mercurial (1347EX)[§] was more effective than Mercuhydrin® if mercurial content was used as a basis of comparison. It was observed that 10 mg. doses of Neohydrin® were equivalent to 0.5 cc. of Mercuhydrin® (20 mg. mercury) and that this dose was inadequate to bring about compensation of the patient in congestive failure. It was only when the dose of Neohydrin® was increased to the mercurial level of Mercuhydrin® that failure was controlled. This is probably an expression of the dosage response [12] curve of most drugs and indicates that a threshold dose of mercury must be delivered to the kidney for ionization [4,5,6] before an effective diuretic response is established. The smallest dose for Mercuhydrin® that is consistently effective appears to be 0.5 cc. It is apparently the same for Neohydrin;® lesser amounts of either do not control congestive failure. Electrolyte studies showed a marked increase in urine sodium excretion. The concentration of sodium per unit volume of urine is also increased. Gold [7] conducted experiments with oral diuretics by means of a human assay method and concluded that "the diuretic response of Neohydrin® was equivalent to the results obtained by the conventional doses of intramuscular Mercuhydrin® in patients with congestive failure." Orally, the diuretic potency was somewhat more than one-fourth of its potency by intramuscular injection and by the latter route 4.3 times (in mg.) as potent as intramuscular Mercuhydrin.® Gold knew of no other mercurial diuretic with such a favorable ratio of intramuscular to oral potency.

Thirty-three patients with myocardial failure were selected for this study. The etiology of their heart disease was varied and consisted of arteriosclerotic heart disease, hypertensive cardiovascular disease, rheumatic heart disease, syphilitic heart disease and one case of heart disease of undetermined etiology. The functional capacity of each patient varied from grade 2 to 4 according to the classification of the American Heart Association. All of the patients in this study had been receiving Mercuhydrin® injections for one to five years prior to receiving the oral mercurial Neohydrin.® Twenty-six patients had received Mercuhydrin® injections weekly and seven patients twice weekly. Three of the patients had been receiving Mercuhydrin® injections for five years, two for three years, eight for two years, and the remainder for two to eighteen months. In addition to the oral mercurial, all of these patients were maintained on digitalis, salt free diet (as well as one could expect on an outpatient basis), aminophyllin, and ammonium chloride. All of the patients received blood counts, urinalyses, chest x-rays, fluoroscopic examinations, electrocardiograms, and electrolyte studies whenever clinically indicated.

The advantages of an oral mercurial which replaces Mercuhydrin® injections in part or

* From the Cardiac Service, St. Barnabas Hospital and for Women and Children, Newark, N. J.
Neohydrin supplied through the courtesy of Dr. H. L. Daiell, Lakeside Laboratories, Milwaukee, Wis.
† Associate Cardiologist.
‡ Cardiologist.
§ 1347 EX—Investigation number of tablets now known as Neohydrin.

completely are obvious, provided there are no toxic effects over a long period of time. The initial dose of Neohydrin® in the first nine cases was one tablet (equivalent to 10 mg. of mercury) twice a day, but it was soon obvious that compensation could not be maintained on 20 mg. of mercury daily. The dose was increased to one tablet three or four times daily in all subsequent cases and compensation was maintained. Thirteen patients received 3-4 tablets of Neohydrin® daily for six to twelve months and nineteen patients from two to five months. All patients were questioned carefully at each clinic visit as to any toxic reaction including sore mouth, vomiting, abdominal cramps, diarrhea, anorexia, or any unusual change in urination. There were four patients who were considered failures because they could not continue on the Neohydrin,® although toxic manifestations (vomiting and diarrhea) were present in only two of them.

CASE REPORTS

T. C., with luetic heart disease and bilateral bullous emphysema, was receiving Mercuhydrin® injections weekly prior to taking Neohydrin.® Although his dyspnea and edema disappeared while taking the oral mercurial (three tablets daily for three months) without any injections, he was very apprehensive about not getting his "shots" and persisted in complaining of "tightness of the chest because of the tablets." He refused further oral medication, preferring the injections.

A. B., with rheumatic heart disease, started to vomit after one week's therapy, and medication was stopped.

M. H., with arteriosclerotic heart disease, was taking Neohydrin® (one tablet twice daily) for two weeks without results and an increase in dosage was advised; he refused therapy.

M. J., with hypertensive cardiovascular disease, was taking three tablets daily with complete relief of all symptoms of failure and required no further injections of Mercuhydrin® but complained of "sprinkling all day long" while she was taking the oral mercurial. The dose was cut down to two tablets daily, but her diuresis was so constant she refused further therapy.

D. G., with rheumatic heart disease, took four tablets of Neohydrin® daily for four weeks. He gained three pounds and did not improve clinically. Medication was stopped, and he was given Mercuhydrin® injections weekly for the next month. He was again started on Neohydrin® three times a day and for the past five months has not required any Mercuhydrin® injections and has improved clinically. Although considered a failure after the first attempt of therapy, this patient is completely compensated.

R. D., for one week mistaking the tablet for ammonium chloride, took six tablets a day. The only untoward effect was diarrhea; the patient otherwise reported great relief in his breathing capacity.

The results in the remaining twenty-seven cases of this series (Table 1) were dramatic. These patients had complete relief of their symptoms both subjectively and objectively after the first two weeks of Neohydrin® therapy. Prior to the oral mercurial therapy all of them had been receiving Mercuhydrin® injections at least once a week; at the time of this summary (after 2-12 months' observation), not one of these patients had required any parenteral Mercuhydrin.® Nineteen patients have received three tablets daily, twelve four tablets daily, and two two tablets daily. Five of the patients who were seen in the clinic with congestive heart failure for more than ten years stated they have never felt so well. Four of the patients remarked they were now able to sleep through the night for the first time in many years, and could walk without dyspnea and felt more secure in working. The other patients felt as well as when receiving Mercuhydrin® and were extremely grateful that they could live comfortably without injections. Many patients impressed us with the fact that since taking the Neohydrin® they were relieved of the fear of "filling-up," and the extreme anxiety of how soon they could get their injections. Two cases of rheumatic heart disease and two cases of luetic heart disease have been maintained on Neohydrin® completely free of any signs or symptoms of congestive failure after maintenance digitalis was stopped for a period of four months. These patients had been taking digitalis for the previous three years along with Mercuhydrin® injections. It is our intention to attempt withholding digitalis in other cases maintained on Neohydrin® and to report its efficacy.

COMMENT

The maintenance of water balance in congestive failure is the goal of present day therapy. The use of digitalis and parenteral Mercuhydrin® along with a low salt diet has been effective in a high percentage of cases in establishing that balance. The constant need for

TABLE 1

Patient*	Diagnosis	Age	† Duration Mercuhydrin ® Injection	Daily Dose Neohydrin ® (in tablets per day)	Duration of Neohydrin ®	Toxicity	Compensation Without Mercuhydrin ®
M.C.	A.S.H.D.	58	5 yrs.	3	10 mos.	None	Yes
A.P.	A.S.H.D.	71	5½ yrs.	3	11 mos.	None	Yes
M.M.	A.S.H.D.	71	5 yrs.	3	6 mos.	None	Yes
T.C.	Syph.H.D.	43	4 mos.	3	3 mos.	None	Refused—Failure
M.H.	A.S.H.D.	48	3 yrs.	2	2 wks.	None	Not effective—Failure
M.J.	Hyp.H.D.	82	2 yrs.	3	2 wks.	Urinary incontinence	Failure
J.K.	Hyp.A.S.H.D.	66	1 yr.	4	7 mos.	None	Yes
C.N.	Syph.H.D.	62	1½ yrs.	3	11 mos.	None	Yes
V.C.	Hyp.A.H.D.	54	8 mos.	4	8 mos.	Diarrhea—1 wk.	Yes
A.B.	Rh.H.D.	47	14 mos.	3	5 mos.	Vomited	Failure
M.H.	H.A.H.D.	64	7 mos.	3	7 mos.	None	Yes
E.B.	Rh.H.D.	46	8 yrs.	3	8 mos.	None	Yes
D.M.	A.S.H.D.	72	2 yrs.	2	6 mos.	None	Yes
J.H.	H.A.H.D.	58	18 mos.	3	6 mos.	None	Yes
R.P.	A.S.H.D.	58	6 mos.	4	6 mos.	None	Yes
J.P.	A.S.H.D.	60	1 yr.	4	3 mos.	Diarrhea	Yes
D.G.	A.S.H.D.	48	1 yr.	4	6 mos.	Stopped 1 mo.	Yes
S.H.	H.A.H.D.	56	14 mos.	4	5 mos.	None	Yes
W.T.	H.A.H.D.	72	3 yrs.	3	4 mos.	None	Yes
E.J.	H.A.H.D.	63	None	3	6 mos.	None	Yes
M.J.	H.A.H.D.	39	3 mos.	3	9 mos.	None	Yes
R.D.	A.S.H.D.	60	2 yrs.	3	9 mos.	None	Yes
C.M.	A.S.H.D.	60	5 yrs.	3	11 mos.	None	Yes
S.S.	Rh.H.D.	52	2 yrs.	3	10 mos.	None	Yes
L.C.	A.S.H.D.	60	2 yrs., 8 mos.	3	10 mos.	None	Yes
E.T.	A.S.H.D.	58	2 yrs.	3	10 mos.	None	Yes
R.D.	Rh.H.D.	37	2 yrs.	4	4 mos.	None	Yes
F.P.	A.S.H.D.	63	5 yrs.	4	5 mos.	None	Yes
L.R.	Unknown	44	4 mos.	4	6 mos.	None	Yes
A.R.	Rh.H.D.	60	1 yr., 7 mos.	3	6 mos.	None	Yes
F.P.	A.S.H.D.	63	4 mos.	4	5 mos.	None	Yes
A.R.	Rh.H.D.		3 mos.	4	4 mos.	None	Yes
F.H.	Syph.H.D. Aneurysm	46	1 yr.	4	6 mos.	None	Yes

A.S.H.D.—Arteriosclerotic heart disease.

Syph.H.D.—Syphilitic heart disease.

Rh.H.D.—Rheumatic heart disease.

H.A.H.D.—Hypertensive arteriosclerotic heart disease.

* All patients on maintenance digitalis and salt free diets except C.N., E.B., A.R., and F.H., compensated without digitalis or quinidine.

† Prior to Neohydrin ® therapy.

Mercuhydrin® injection therapy is familiar to all physicians treating congestive heart failure. It is also appreciated that all patients vary in the rapidity with which they reaccumulate fluid in their tissues, and that it is only a matter of time before the patient again presents the signs and symptoms of fluid retention requiring another mercurial injection. Our experience during the past year with Neohydrin® has presented a new picture of the patient in congestive heart failure. We were struck by the improved appearance of these cardiac invalids. No longer did we see the dyspneic patient with pitting edema seeking his injection. Our cardiac patients maintained on Neohydrin® now presented themselves without any of the previous stigmata of the heart invalid. Many cardiac patients who have been attending the clinic regularly for years in order to get their injections now inquire of the medical staff why it is necessary for them to return so often as long as they can secure the "blue tablets." There is probably a long term beneficial effect on the general nutrition of tissues when they are not subjected to the see-saw effect of edema and dehydration which occurs with the usual management of weekly injectable mercurials. Longer observation is now necessary to evaluate the course of congestive heart failure under this new regime. How long can these patients take the oral mercurial with effect? Will the life span of these patients be lengthened? What is the effect upon the myocardium and kidney over a long period of time? These questions can be answered only by careful observation of patients taking Neohydrin® over a longer period of time.

SUMMARY

1. A new oral mercurial diuretic was given to thirty-three patients in congestive heart failure, all of whom had previously received Mercuhydrin® injections at least once a week and were maintained on digitalis and a low salt diet.

2. Four patients stopped medication because of unpleasant side effects. One patient stopped because he did not show improvement, but after one month started again and became fully compensated.

3. Twenty-eight patients tolerated the drug well (two to twelve months). All signs and symptoms of congestive heart failure disappeared. No Mercuhydrin® injections were necessary in this group.

4. The most effective dose was one tablet of Neohydrin® (10 mg.) three or four times a day.

5. With Neohydrin® therapy, the effective maintenance of cardiac compensation and improvement in tissue nutrition is also accompanied by a marked restoration of confidence and well-being.

299 Clinton Avenue

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GENERALIZED DERMATOSIS CAUSED BY DENTAL INFECTION

A case report of bacteria sensitivity and its control by desensitization.

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Samuel N. Knopf, D.D.S., Brooklyn, N. Y.

Although the teeth have frequently been the scapegoat for physicians attempting to explain a dermatosis of unknown etiology, most of these eruptions have never been proved to be of dental origin. The recurrent generalized dermatitis reported here followed dental treatments and varied in severity directly with the amount of trauma to the gums. Relief was brought about by desensitization with an autogenous vaccine.

In the 40 years which have elapsed since the introduction of the concept of "focal infection" by Billings,[1] a formidable array of generalized and local diseases have been attributed to blood- or lymph-borne micro-organisms or their toxins arising from a focal infection. During this period we have gone through several cycles, the major one climaxed by the work of Rosenow[2] on elective localization of focal infections. Recently all but the ophthalmologist[3] have neglected focal infection as the cause of these same illnesses. It has been the meager positive clinical evidence that a focal infection causes these diseases that has resulted in the declining popularity of this concept. In this light our case assumes greater significance.

A focal infection is defined as "an infection in which bacteria exist in circumscribed areas or foci in certain tissues and from there are sent out into the blood stream. The favorite sites are the tonsils, periodontal tissue, nasal sinuses, fallopian tubes, and prostate gland."[4] Until recently, the only recognized oral foci were the areas surrounding the apices of infected teeth. However, evidence has been accumulating to show that periodontal pockets are even more dangerous as foci of infection.[5] The reasons for this are: 1. At least twenty times the absorptive surface is involved in an average case of periodontal disease as in a well developed periapical abscess. 2. Absorption from the gingival sulcus is more rapid since the blood and lymph supply is greater especially when the abscess is surrounded by a degree of bony condensation as is usually the case in chronic abscesses. 3. The resistance to bacterial growth is lower in the gingival sulcus than anywhere else in the oral cavity because of food accumulation and stagnation.

Appleton[6] states that surgical manipulation of the infected parts introduces an unusually large quantity of antigens (the bacteria or their toxins) into the circulation. The host who has become sensitive to these will then react with various pathologic manifestations. It has been demonstrated that blood cultures taken a few moments after extraction of infected teeth result in streptococcal bacteremia for a few minutes in 75% of cases.[7] It has also been shown that exacerbations of this bacteremia occur following spontaneous flare-ups of the infected focus.[8]

Cases have been reported giving focal infection as the cause of various skin diseases,[9,10,11] erythema multiforme,[12] alopecia areata,[13] pustular bacterids,[14] persistent localized bullous eruptions,[15] and dermatitis herpetiformis (Duhring).[16]

CASE REPORT

On September 20, 1947, a 28-year-old, well-developed white male was seen who gave the following history: While in the army, he had two attacks of vesicles and bullae of his hands and feet which later became generalized. They oozed, were finely crusted and erythematous, and there was swelling of the face. These attacks required 22 and 10 weeks of army hospitalization respectively. The present attack began on September 13 as an itchy erythema of the back of his hands and of his neck. Immediately after this he noticed blisters of the hands and three days later his face became swollen and was covered with a fine crust. During this period the eruption became generalized. Examination showed his hands to be swollen with many bullae. The face was puffy and was involved in a fine perifollicular papulo-vesicular eruption covered with a fine branny crust. The extremities and most of the body were similarly involved. The toe web spaces were normal. He was treated with colloid baths and compresses soaked in Burow's Solution 1:20 three times daily, Pyribenzamine® up to 100 mgm. every four hours, plus a bland emollient zinc oxide ointment preparation. The

response was rapid and he was discharged after one month.

He returned on May 17, 1948 with the same bullous eruption of his hands of two days' duration. This was treated as before and seemingly aborted the attack in four days.

On July 19, 1948 he again returned with bullae of his hands and the same generalized eruption. This had begun on July 4 with fine vesicles of his hands and feet. These became bullae on July 14. The eruption also broke out on his body and extremities at this time. By July 29, the lesions warranted hospitalization and he entered the local Veterans Administration Hospital for one month. It was on July 19, in discussing the possible causes of this eruption, that the dermatologist first learned that the patient had had a tooth extracted on July 13, and had had various extractions and dental care a number of times in the past. (Table I.) Following his hospital discharge he was tested with the penicillin and the anesthetic used by the dentist. Both gave negative reactions. On the morning of September 27, he was given 600,000 units of penicillin in oil and later that day had his lower right first

TABLE I

TIME RELATIONSHIP BETWEEN DENTAL WORK AND SKIN REACTIONS.

	Date	Dental Work	Skin Reaction	Comment
1.	May 11, 1948	Deep scaling and curettage		Eruption followed dental manipulation in a sensitized patient.
	May 15, 1948		Vesicular eruption of hands and forearms	
2.	July 2, 1948	Extraction of left upper 1st and 2nd molars under nitrous oxide anesthesia		General anesthesia was used instead of local. Reaction occurred nevertheless.
	July 4, 1948		Vesicular eruption of hands	
3.	July 13, 1948	Extraction of left lower 2nd bicuspid and 1st molar under local anesthesia		
	July 14, 1948		Generalized fine oozing peri-follicular eruption	
4.	July 28, 1948	Extraction of upper 1st molar under local anesthesia		
	July 29, 1948		Generalized exacerbation requiring hospitalization	
5.	Sept. 27, 1948			Following negative tests for procaine and for penicillin, 600,000 units penicillin were administered intramuscularly.
	Sept. 28, 1948	Extraction of right lower 1st molar		Although penicillin may have prevented multiplication of bacteria in blood, it did not prevent allergic skin reaction.
	Sept. 29, 1948		Acute generalized exacerbation with bullae of hands and feet	
6.	Jan. 7 to Feb. 18, 1949			Desensitization with autogenous vaccine.
7.	Mar. 10 to 17, 1949	Three teeth extracted	None	
8.	Mar. 21, 1949	Extraction of tooth with surgical removal of apical stump		Dermatitis despite desensitization. Due to excessive trauma and subsequent bacteremia. Of relatively short duration, however.
	Mar. 22, 1949		Acute generalized eruption. Bullae of hands and feet	
9.	Mar. 23 to Apr. 8, 1949	Five extractions	None	Desensitization reduced reaction of patient to toxins or bacterial foreign protein.

molar removed. The penicillin was given to counteract any bacteria that might gain access to the blood stream following the extraction.[7] Despite this, he developed a fine vesiculation of his face, body and extremities, and a bullous eruption of his hands and feet all starting within three hours of the extraction. It was then concluded that the eruption was due to a skin sensitivity to the organisms involved and we decided to desensitize the patient with an autogenous vaccine.[9] The dentist took a culture by removing a section of the infected granulation tissue from a periodontal pocket of the lower central incisor. This culture grew a pure strain of micro-aerophilic alpha hemolytic streptococci. The autogenous vaccine was prepared from tricresolized organisms in a concentration of 100 million organisms per cubic centimeter. The intracutaneous test dose of 0.01 cc. of this vaccine produced an erythema. A course of graded subcutaneous desensitization injections was given, being concluded after seven 1.0 cc. injections on February 18, 1949.

He then had his remaining teeth extracted, first one at a time, and later in groups of two. The first three produced no skin reaction. The fourth tooth broke in the extraction and the trauma necessary to remove the apex of the root probably produced an overwhelming bacteremia. Within three hours, he felt flushed and his skin became red. During that night, the eruption became generalized and oozed and itched considerably. Two days later he developed bullae on his hands. This responded rapidly to the previously instituted therapy. Recovery was uncomplicated despite five more normal extractions performed during this period. Follow-up examinations, the last in June 1952, revealed no further attacks. There had been no new dental work.

DENTAL RECORD

No dental record was available prior to May 1948. On May 11, 1948, he received a gum treatment consisting of deep scaling and curettage. For relationship of this and subsequent dental treatment to the skin eruption see Table 1. X-ray examination at that time revealed large amounts of alveolar bone in both jaws destroyed by a horizontal type of periodontoclasia, especially on the left side and about the lower anterior teeth. Inspection showed gingivae of poor tone with margins receding from the necks of the teeth. The interdental papillae were destroyed, allowing accumulations of debris to collect in the sulci between the teeth. A small amount of pus could be expressed from the resulting pockets.

On July 2, he had the left upper first and second molars removed. He then had the left lower second bicuspid and first molar extracted on July 13, the right upper first molar on September 28, and nine other teeth between March 10 and April 8, 1949. These last extractions were begun three weeks after the course of desensitization injections was completed. All were uneventful except the fourth during which the tooth broke, leaving an apical stump requiring additional trauma for its removal.

COMMENT

No diagnosis has been included in this report, but if one must be made, the best one probably would be "generalized toxic eruption," possibly with an erythema multiforme bullosa of the extremities. However, there are several points against this diagnosis. The eruption followed immediately after dental work on six separate occasions, sometimes within three hours. Survey of the literature of the last 15 years showed no similar case report.

Following desensitization nine teeth were extracted with only one reaction; this after an unusual amount of trauma. We believe that this is fairly conclusive proof that this dermatitis was caused by the temporary bacteremia resulting from dental work in the presence of skin hypersensitive to the cultured organism, the micro-aerophilic alpha hemolytic streptococcus. Treatment by desensitization with an autogenous vaccine was successful in preventing further attacks.

It is our desire to bring to the attention of the medical and dental professions the possibility of this sensitivity and the means of combatting it.

115 South Munn Ave., East Orange, N. J.
303 Broadway, Brooklyn, N. Y.

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STATE ACTIVITIES

YOUR PLAQUE

In his presidential address at our annual meeting in May 1952, Dr. Harrold A Murray expounded his entire program for the coming year in a compact package of ten challenges facing medicine. The basic precept of that address was an answer to the important question, how can we best improve our public relations?

We firmly believe that mutual understanding in doctor-patient relationship results in the best public relations. This, however, can only take place as long as the individual doctor constantly devotes himself to promoting this principle. This is as it should be, since better medical public relations begins and rests with him.

This plaque besides denoting membership, has been designed to remind our citizens of certain basic concepts pertaining to the medical profession so they may better appreciate the true worth of their physicians.

Of particular interest to every physician and his patient is the concept, "fees within the patient's ability to pay". The majority of our profession has done very well with this problem. We can achieve even better results on this question of satisfactory fees. A reciprocal effort by the public itself, based upon the philosophy "a man is worthy of his hire", can result in a happy solution for all concerned.

The availability to each person of either his desired physician or a suitable substitute is obvious because of the very nature of our profession.

Lastly, changes in modern society necessitate the participation by physicians in community activity with their fellow citizens. More and more their help is needed in medico-socio-economic problems.

Your plaque is more than a legend, it is a symbol of unity. The aim of our great society since its founding in 1766 has been service to mankind through better medical care. In carrying out their humanitarian work our members have instinctively followed the spirit of our public relations slogan, "Public Relations For Medicine Means Personal Responsibility For You."

Frank S. Forte, M.D., Chairman
Subcommittee on Public Relations

THE MEDICAL RESEARCH COMMITTEE

Medicine progresses in its ability to serve only as fast as research provides new knowledge and methods for its application. The medical profession is entrusted with the final responsibility for the use of the products of research. It has a stake in assuring that competent medical investigations shall proceed apace with basic laboratory investigations and other studies which show promise in the prevention, diagnosis, or treatment of illness, and which should be studied critically. The profession has an equal responsibility to protect the public against premature or unwarranted claims.

New Jersey has been the scene of many outstanding research activities, but far more can be accomplished. The State Medical Society membership numbers more than five thousand. There are many hospitals, institutions, and other organizations and facilities which are not being utilized to their fullest for service to medicine and community. There are institutions of higher learning with facilities and personnel for basic research from which applied studies must spring. The state is distinguished as the location of many of the largest pharmaceutical companies in the world. These corporations, which make many products of medical research available to the entire nation, have tremendous research responsibilities and expend huge sums for this purpose.

The Medical Research Committee has been created to represent The Medical Society of New Jersey in dealing with problems of medical research. Dr. Harrold A. Murray, President of the Society, initiated the formation of the committee to focus attention on the research facilities available in New Jersey to encourage medical research and to make it clear that the Medical Society has a positive program interested in all phases of health. This committee, which reports directly to the Society's Trustees, considers problems of interest to

other Society committees and cooperates with them in joint discussion and action when indicated.

The committee stands ready to deal with medical research problems in a number of different ways. On request, it will act in an advisory capacity to potential research sponsors or to a facility such as a hospital contemplating a research activity. Experts will be utilized as consultants to the committee when needed.

In carefully selected instances, the committee on request will endorse, approve or lend its name in sponsorship to a research project. The final decision to do so rests at all times with the committee.

While not planning any intensive survey at this time, the Medical Research Committee will attempt to serve as a clearing house for information as to research facilities and personnel in this state.

When announcements are made of research discoveries which appear to be of widespread interest to the profession and the public, the Medical Research Committee may in cooperation with other Society committees, the State Department of Health or other appropriate groups, or by itself consider the report and make such statements to the Society and to the public as it considers necessary.

Any individual or organization wishing to call on the advisory services of the Medical Research Committee * or to bring problems of medcial research to the attention of the committee should address inquiries to: Chairman, Medical Research Committee, The Medical Society of New Jersey, 315 W. State Street, Trenton 8, N. J.

RAY E. TRUSSELL, M.D.

*Present committee membership. Dr. Daniel Bergsma, Dr. Samuel Blaugrund, Dr. John Rowland, Dr. Alan Wright, Dr. Ray Trussell, Chairman. Consultants: Dr. Walton Van Winkle, Mr. J. Harold Johnston.

SURVEY ON SMOKING

Three members of the Essex County Medical Society are conducting a study concerning the personal reactions of physicians in regard to their own smoking habits. The following letter has been received pertaining to this survey:

Members of The Medical Society of New Jersey will receive a questionnaire from us in the very near future. This questionnaire relates to the experiences of each physician with his own use of tobacco. We wish to emphasize that this survey is being made for strictly scientific purposes. It is in no way supported by tobacco companies or the anti-tobacco societies.

We will appreciate the completion and prompt return of each questionnaire by every member of the Society.

Sincerely yours,

FRANK ROSEN, M.D.
JACOB SCHMUKLER, M.D.
ALLEN WELKIND, M.D.

WORKMEN'S COMPENSATION SEMINAR

The New Jersey State Department of Labor and Industry announces an all-day seminar on the subject of the Workmen's Compensation Law, to be held at Rutgers Law School, 37 Washington Place, Newark on May 9, from 9:30 to 5:30. The program will consist of a series of discussions presented by the faculty of Rutgers Law School and the New York University School of Industrial Medicine.

Among those taking part will be Doctors David H. Goldstein, Wallace B. Murphy and Maxwell Poppel. The legal side will be presented by Professors Arthur Larsen and Wex Malone.

There will be a fee of $5.00.

INDUSTRIAL MEDICINE COURSE

The Institute of Industrial Medicine of the New York University-Bellevue Medical Center will hold a two-week intensive course on the subjects of industrial medical practice and the medical aspects of workmen's compensation. This course will consist of daily sessions from 10 a.m. to 5 p.m., May 11-23.

A comprehensive discussion of all medical and surgical aspects of industrial medicine with a consideration of compensation and insurances aspects of this problem will be presented. The tuition is $50.

Further information and application forms may be obtained from The Dean, Post-Graduate Medical School, New York University-Bellevue Medical Center, 477 First Avenue, New York 16, N. Y.

ARTHRITIS MANUAL

The Arthritis and Rheumatism Foundation announces publication of a manual for arthritis clinics. This manual is a 64-page volume discussing the administration of an arthritis clinic and diagnostic and therapeutic criteria for the various arthritides. Copies may be obtained from the national headquarters of the Foundation, 23 West 45 Street, New York 36, New York, at 50 cents each.

OPENING FOR CHIEF MEDICAL DIRECTOR

The Board of Education of the City of New York announces an examination for the position of its chief medical director. Information concerning the requirements and duties of this position may be obtained from Dr. Jacob Greenberg, Room 510, 110 Livingston Street, Brooklyn 1, N. Y. Applications must be submitted before June 15, 1953.

OBITUARIES

DR. WALTER G. ALEXANDER

Dr. Walter G. Alexander of Orange, died at his home on February 5 at the age of 72.

Dr. Alexander was born in Lynchburg, Va., and received his medical degree from Boston College of Physicians and Surgeons in 1903. His talents were recognized even as a student when he won two prizes for theses on neuroanatomy and tuberculosis. Dr. Alexander practiced medicine in Orange since 1904. In 1907 he organized the North Jersey Medical Society and in 1939, the New Jersey State Medical Association. He was a member of the New Jersey State Board of Health and became vice-president of the Board in 1946. He also served as member of the Governor's Committee on Health and Welfare, the medical advisory committee of the National Youth Administration, the health and welfare committee of the State Defense Council, and the medical advisory board of the Orange Local Assistance Authority.

In 1946 he received the distinguished service award of the National Medical Association for his devotion to medical affairs. Dr. Alexander was also active in non-medical pursuits. He was a member of the Lincoln University Board of Trustees, and from 1931 to 1936, president of its Alumni Association. He was active in state and city politics, and in 1920 was elected to the State Assembly.

DR. HAROLD C. COX

Dr. Harold C. Cox of Hightstown died on February 13 at the age of 52.

Dr. Cox was graduated from the University of Pennsylvania Medical School in 1926, and served on the staff of St. Francis Hospital, Trenton, and Princeton Hospital. He was a past president of the Mercer County Medical Society and was active in Hightstown civic affairs.

DR. LOUIS F. WETTERBERG

Dr. Louis F. Wetterberg of Woodbridge died on December 10, 1952 at the age of 56.

A graduate of Harvard Medical College in 1923, he served as resident physician at Kings County Hospital, Brooklyn, following which he became attending neurologist at the same hospital. He was also a member of the staffs of Polhemus Memorial Hospital, Beth Israel Hospital in Newark, and Perth Amboy General Hospital. He was a Fellow of the American College of Physicians and was active in fraternal and civic organizations in his community.

Medical-Surgical Plan of New Jersey

"New Jersey's Blue Shield Plan"

WHY EVERY DOCTOR SHOULD BE A PARTICIPATING PHYSICIAN

Medical-Surgical Plan is the medical profession's own constructive contribution to the problem of making available prepaid medical service. It was organized through the initiative of The Medical Society of New Jersey.

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Medical-Surgical Plan exists only so long as a majority of the practicing physicians of New Jersey support it as Participating Physicians. In order for Medical-Surgical Plan to expand and achieve its maximum enrollment, it is urgently desirable that all eligible physicians in the state participate.

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Your Participation in Medical-Surgical Plan is the most practical contribution you can make to the preservation of the American plan of medical practice. Blue Shield Plans—of which Medical-Surgical Plan is a pioneer and leader—represent organized medicine's proof that voluntary medical care can become the practical solution to the health problem.

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Your Participation in Medical-Surgical Plan is tangible evidence to your patients and to the more than 1,600,000 subscribing members of the Plan that you are taking part in the national effort of your profession to meet the public need for prepaid medical service through voluntary methods.

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Medical-Surgical Plan is the only medical insurance plan in New Jersey that makes available *service* benefits to the patient, and direct *cash* benefits to the physician.

●

The average payment per case made by Medical-Surgical Plan in 1952 compares exceedingly favorably with that of any other Blue Shield plan in the United States. Many of these payments were made on behalf of subscribers who—except for Medical-Surgical Plan—would have been attended by their physicians with little or no compensation to the physician.

●

Medical-Surgical Plan is advised by the organized medical profession in New Jersey. More than half its Trustees must be members of The Medical Society of New Jersey, and every Trustee must be approved by the Society before election to the Board.

●

Medical-Surgical Plan has been guided and sustained by the devoted and unremunerated services of many leading members of the profession. It is supported by over 5,000 New Jersey physicians who have voluntarily signed an agreement with the Plan as Participating Physicians. *Are you doing your share?*

COUNTY SOCIETY REPORTS

ATLANTIC COUNTY

Leonard B. Erber, M.D., Reporter

A regular meeting of the *Medical Society of Atlantic County* was held at the Traymore Hotel, February 13, at 9 p.m., DR. R. D. HARLEY, presiding.

The guest speaker was MR. L. O. HOOPER, an international authority on investments.

A new development in the policy of all major insurance companies issuing malpractice insurance was brought to the attention of the Society by DR. GLEASON. He stated that since September 1st, 1952, all policies have, or will, contain a ten day cancellation clause that can be enforced at the discretion of the company. He added that such an action was fraught with danger not only to the few that might be involved, but to every practicing physician. In the discussion, it was recommended by DR. ELLENBOGEN that the Committee for Medical Defense and Insurance investigate at a state level whether such a major change in policy would not constitute a monopolistic action and unfair restraint of trade. Dr. GLEASON noted that such an investigation is already being made. It was finally urged on all members to use every precaution and care both in remarks and actions, so as to forestall at the source the great increase in malpractice suits.

DR. WEINTROB discussed briefly the present status of Health and Accident Insurance and suggested that the situation be reviewed and a report given to the society.

DR. MISHLER, reporting for the Broadcasting Committee, stated that the program "Your Doctor" on WFPG would now be broadcast on Saturdays at 4:15. He commented on the relative dignity of the medical program in contrast to a melodramatic chiropractors' program which immediately precedes it.

DR. DISKAN reported for the committee for the adoption of an appropriate symbol or medal to be presented to all past presidents as a token of esteem.

DR. MOLITCH was appointed as a representative of this society to assist in the formation of a new local mental hygiene clinic.

BURLINGTON COUNTY

William F. Betsch, M.D., Reporter

On February 12, the *Burlington County Medical Society* held a dinner meeting at the Riverton Country Club, the Burlington County Bar Association being our guests. President ARTHUR B. PEACOCK, M.D., presided.

Guest speaker for the evening was DR. WILLIAM S. WADSWORTH, Coroner's Physician of the County of Philadelphia, Pa., who, speaking on "The Medico-legal Aspects of Toxicology", reviewed his varied experiences in this field.

CAMDEN COUNTY

James P. Harbeson, III, M.D., Reporter

The regular monthly meeting of the *Camden County Medical Society* was held at the West Jersey Hospital on March 3. DR. EDWIN R. RISTINE, President-elect, was in the chair.

DR. HELEN SCHRACK read a memoir on the passing of DR. EMMA RICHARDSON. DR. BARNSHAW reported that the annual outing will be held on Tuesday, June 9, at Tavistock Country Club. A resolution that this society urge all its members to volunteer one or two days a year to serve on the Blood Mobile Unit visits in the county was adopted.

DR. EDWIN ROSNER announced a post-graduate course to be given at the West Jersey Hospital on the treatment of heart disease.

DR. JACOB C. LIPPINCOTT was elected to membership.

DR. VINCENT BUTLER, Second Vice-President of the State Society spoke to the meeting concerning the proposed Medical-Dental School.

The scientific portion of the meeting consisted of several interesting case presentations by the staff of the West Jersey Hospital.

GLOUCESTER COUNTY

Louis K. Collins, M.D., Reporter

With DON B. WEEMS, M.D. in the chair, the *Gloucester County Medical Society* met at the Woodbury Country Club, February 19.

Reporting for the Legislative Committee, I. N. PATTERSON, M.D. discussed the present status of the Chiropractic Bill. He also mentioned two other State bills that had come to his attention: one pertaining to state board examinations by graduates, the other would permit veterans over 40 years of age with no accredited M.D. degree to take the exams. Nationally, DR. PATTERSON stated that the AMA opposed cabinet status for the director of the Federal Security Agency, Mrs. Hobby.

The speaker of the evening was ANTHONY F. DEPALMA, M.D., Professor of Orthopedic Surgery at the Jefferson Medical College. DR. DEPALMA discussed "Orthopedic Problems of Interest to the General Practitioner".

MIDDLESEX COUNTY

Harold V. Cano, M.D., Reporter

The regular monthly meeting of the *Middlesex County Medical Society* was opened by DR. CARLYLE MORRIS, the president, at 9:00 p.m., at the Roosevelt Hospital, Metuchen, on February 18.

DR. STEPHEN JONAP of South Amboy was elected to regular membership from associate membership; and DR. MILTON R. BRONSTEIN of Fords was elected to a one-year period of associate member-

ship on transfer from the Essex County Medical Society.

The Board of Trustees' recommendation that the program submitted by the Public Relations Committee not be accepted, but that a modified program be presented at a later date, was approved.

During the scientific session DR. LOUIS T. SOFFER of Mount Sinai Hospital, New York, discussed "The Adrenal Cortex: Clinical and Physiological Considerations".

A resolution embodying improvements in the Doctor Draft Law was adopted.

A resolution censuring an interview of DR. P. R. HAWLEY, Director of the American College of Surgeons, which was published in the United States News and World Report for February 20, was adopted, and a copy of this resolution forwarded to the Board of Trustees of the State Society for its action.

MONMOUTH COUNTY

Sidney M. Hodas, M.D., Reporter

A regular meeting of the *Monmouth County Medical Society* was held on January 28, at the Monmouth Memorial Hospital, Long Branch.

DR. VINCENT J. COLLINS, Chief of Anesthesia, St. Vincent's Hospital, New York made a presentation on "Relief of Pain", in which he discussed the value of nerve blocks.

DR. SAMUEL STEVENS of Deal and DR. RALPH B. THOMAS of Long Branch were elected to Associate membership in the Society.

MORRIS COUNTY

Albert Abraham, M.D., Reporter

The *Morris County Medical Society* held its regular February meeting on Thursday, February 19, at the Chilcott Laboratories in Morris Plains. The Medical Society was host to members of the Morris and Somerset Pharmaceutical Association. The speaker of the evening was Detective PHILIP WHITCOFF of the New Jersey State Police.

The speaker outlined the problems faced by the state police in enforcing the New Jersey narcotic legislation and in cooperating with federal narcotic authorities. Detective Whitcoff, himself a pharmacist, was in a particularly good position to discuss the problems of the pharmacist and of the physician in their daily contacts, especially in relation to prescription practices and dispensing of narcotics. The speaker also discussed to some extent the problem of criminal addiction and narcotic peddling in this state.

PASSAIC COUNTY

David B. Levine, M.D., Reporter

The regular monthly meeting of the *Passaic County Medical Society* was held at the Medical Society Building on Tuesday, January 20, at 9:00 p.m. DR. JOSEPH M. KEATING, the president, presided.

The following were elected to membership: Active—IRVING BORNSTEIN, East Paterson; PAUL PHILLIPS and HENRY D. SHAPIRO, Paterson; Associate—FREDERICK S. BARNES, Passaic.

DR. LEVINSOHN introduced the following panel, who discussed various aspects of the alcoholic problem: HON. HYMEN SIEGENDORF, Magistrate of the Municipal Court of Passaic; MR. HENRY T. TESCH of the Alcoholism Control Program, Division of Chronic Illness Control, New Jersey State Department of Health; and THOMAS H. MCGUIRE, M.D. of New Castle, Delaware, who acts in an advisory capacity to Alcoholics Anonymous. The principal speaker of the evening was C. NELSON DAVIS, M.D., Director of the Malvern Institute, Malvern, Pa., and chairman of the Philadelphia County Medical Society's committee on the Study of Alcoholism. Following this seminar a resolution was adopted that the president of the Society appoint a committee to study the problem of chronic alcoholism.

SALEM COUNTY

Joseph H. Fishbein, M.D., Reporter

The regular monthly meeting of the *Salem County Medical Society* was held February 20, at the Du-Pont-Penns Grove Country Club under the chairmanship of DR. JOHN S. MADARA.

DR. CORIELL of the Camden Municipal Hospital spoke on routine immunization procedures and highlighted his talk with some interesting facts about poliomyelitis.

Plans for the annual shad dinner were discussed and DR. C. SPENCER DAVISON was delegated to make the arrangements.

RESIDENCIES IN PSYCHIATRY AVAILABLE

The Veterans Administration Hospital, Lyons, New Jersey, has available residencies in psychiatry for a one to three year period which are fully accredited by the American Board of Psychiatry and Neurology. The training can commence at any time and the program consists of lectures, conferences and seminars under the direction of the Department of Psychiatry, New York Medical College, and offers intensive training, both intramurally and through rotation in special hospitals in the adjacent area. There is, in addition, a series of extensive guest lectures as well as an annual institute at the hospital.

WOMAN'S AUXILIARY

EXECUTIVE BOARD MEETING

Mrs. Stuart Z. Hawkes, Chairman, Press and Publicity

The Executive Board Meeting of The Woman's Auxiliary to The Medical Society of New Jersey was held March 9, at the State Society Headquarters, Trenton.

Mrs. E. Dyer reported concerning her visits to the Public Relations programs of the Atlantic, Union and Hudson Auxiliaries. Mrs. Austin J. Tidaback reported on the State Consultant Committee on Chronically Ill which hopes to form a homemaker's plan. Speaking about the convention in Atlantic City, Mrs. Harry Subin said that all plans have been completed and that the tentative program has been sent to all state officers and county presidents. Mrs. Oswald R. Carlander requested that all county historians make a complete report. Mrs. R. John Cottone requested that we must welcome most cordially the wives of all the physicians who attend the convention, and that we must make the newer members of the group feel at home. Mrs. Anton P. Randazzo, the legislative chairman, said that a key man will be appointed in each county who will keep the Auxiliary up to date on current legislation. Mrs. Samuel Jessurun gave a comprehensive report on medical history. The Chairman of Nurse-Recruitment, Mrs. Clarence Whims, said that two schools in Ocean County are forming Future Nurses Clubs and she suggested that the film "Keepers of The Lamp" be shown in the interests of nurse recruitment. In discussing *Today's Health* Mrs. Frank L. Perry asked the county chairmen to get their subscriptions in and added that the magazine is the one organ we have with which to reach the public. The presidents or their representatives were heard from in reports from the following counties: Atlantic, Burlington, Camden, Cumberland, Gloucester, Hudson, Hunterdon, Mercer, Monmouth, Passaic, Salem and Union.

A luncheon was held at the Carteret Club following the meeting. Mrs. Paul E. Rauschenbach, Jr., Program Chairman, presented Miss Ann Murphy, R.N., Dean of Nursing at the Jersey City Medical Center. Miss Murphy stated that the general public should increase its knowledge of hospitals and suggested that people be encouraged to visit hospitals while they are still vertical. She added that hospital work is a matter of constant education, not only of the student nurses, interns and residents but also of the patient and the public, and that this is in addition to the actual care of the sick. Miss Murphy said that the hospital has become one of the top five industries of the United States. She feels that there is a great need for a public relations program in the hospitals as well as for more financial support. Miss Murphy also discussed the differences in nursing education from the early days in 1860 to today.

AUXILIARY REPORTS

Bergen County

Mrs. E. R. Grueninger, Publicity Chairman

The annual Valentine's Day tea of the *Woman's Auxiliary to the Bergen County Medical Society* was held in the nurse's lounge of the Englewood Hospital on February 10.

Following the tea Mrs. Stuart Alexander, President, called the meeting to order. Mrs. Rufus Little, Membership chairman, reported that nine new members had joined the organization.

It was decided to increase the number of nurse's scholarships to four.

The following officers were elected: President—Mrs. Thomas De Cecio; President-Elect — Mrs. Gus. Steneck; First Vice-President — Mrs. George Rowohlt; Second Vice-President — Mrs. Maurice Re; Corresponding Secretary — Mrs. Lee Solworth; Recording Secretary — Mrs. Sam Joseph; Treasurer—Mrs. Philip Busicco.

Mrs. William Magee introduced Miss Ericka Schurmann of the Paterson Library who discussed the life and works of Robert Schuman.

Essex County

Mrs. Louis L. Covino, Chairman, Press and Publicity

The *Woman's Auxiliary to the Essex County Medical Society* held its 26th annual membership tea, on February 23, at Mother Schervier Hall, St. Michael's Hospital, Newark. Twenty-seven new members were introduced by our membership chairman, Mrs. Arthur Ruccia of Newark.

Following the business meeting, Mrs. Philip D'Ambola of Harrison, program chairman presented a Spring Fashion Show. Our own members were

the models for the afternoon. Mrs. Joseph Ferri, of Newark, rendered several vocal selections.

Hudson County

Mrs. Moses Dolganos, Publicity Chairman

The annual scholarship dessert bridge and fashion show given at Murdock Hall, Jersey City Medical Center, was well attended.

A holiday spirit was in evidence, the refreshments and decorations were in the Valentine mood. The refreshments were served by the juniors (daughters of some of the members).

The entire program of the "open house" meeting on March 2, which featured a Public Relations Day program, was devoted to nurse recruitment. The speakers were Dr. Harry Perlberg, President of Hudson County Medical Society; Miss Ann Murphy, Director of Nursing Services, Jersey City Medical Center; Miss Winifred Walsh, Director of Public Health Nursing Services, Jersey City; and Mr. James Hudson, Assistant Director of Nurses, Jersey City Medical Center.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

A Study in Manic-Depressive Psychosis. By Ake Stenstedt, M.D., Stockholm 1953. Esselte Aktieobolag. Copenhagen 1952. Ejnar Munksgaard. Pp. 112. Paper Cover. Price: 20 Swedish Crowns.

During the 19th century it was generally thought that psychoses were hereditary and that the prime cause of a psychosis was some "neuropathic taint." This thesis was largely discarded during the 1920's and 1930's. It is the current fashion to assert that psychoses and psychoneuroses represent reactions to life's present difficulties. However, manic-depressive psychosis, it is still believed, is a disorder in which heredity plays a significant role.

The present monograph supports this thesis. The author made an exhaustive study of all manic-depressive patients in an isolated rural area in Sweden and found statistical evidence that this psychosis follows a dominant type of inheritance, possibly simple autosomal. No genetic relationship was established between manic-depressive and other psychoses, except that the suicide rate was higher for the siblings of the patients than the general Swedish population. No differences were found with respect to social, financial or educational status of patients or their families as compared to the general profile of the district.

The translation into English is readable and idiomatic except for the jarring use of the word "asylum" for "hospital" and the designation of a "patient" as a "proband." The study is a thoughtful and cautious one. I do not think that the specialized nature of the population group (farmers and fishers in an isolated corner of rural Sweden) invalidates the study in terms of its application to the American population. The monograph will interest psychiatrists and geneticists everywhere.

HENRY A. DAVIDSON, M.D.

Cardiac Therapy. By Harold J. Stewart, M.D. Pp. 634 with 73 illustrations. New York, Paul B. Hoeber, Inc., 1952. ($10.00)

At a time when textbooks related to cardiology roll off printing presses like dime novels, this book is a standout. It is written by a man who has had many years of teaching, both clinical cardiology and physical diagnosis. Like his lectures to the medical students at Cornell University Medical School the material in this text is clear, concise, accurate, and detailed. Yet it is pleasant reading and invariably answers questions in relation to cardiac therapy.

This book meets a real need in cardiology today. It is quite apparent that the author hangs on too tightly to the digitalis leaf. In fact, running through the book one senses the trend to adhere to the old and well tried with some considerable caution about the new.

The bibliography at the end of each chapter could be much more complete. For instance on page 84 in the chapter on digitalis, one's interest is struck by the reference to a work on the excretion and distribution of radioactive digitoxin. The author's name is mentioned. But when one turns to the bibliography at the end of the chapter the author's name, the journal, and other pertinent information are not found. This occurs time and again through the book. Another illustration of this is demonstrated on page 198 in the chapter on congenital heart disease. An interesting case of coarctation of the aorta with an aneurysm distal to the stenosis was reported by Shumacker. Yet no reference is made to the author and his article in the bibliography.

Some of the newer therapies in cardiology are passed over very lightly in many instances. It

might have been very helpful to the practicing physician to have presented a more detailed discussion of the treatment of shock following myocardial infarction. Some of the complications following myocardial infarction are omitted. This may be because of lack of suitable therapies for these complications. One of these is rupture of a papillary muscle.

In spite of these criticisms this book should be on the shelf of every general practitioner, internist, and cardiologist. It is rich in information, lucid, sound in its doctrine, and definitely designed to help the physician who would investigate its contents.

A. D. Dennison, Jr., M.D.

Nutrition and Diet in Health and Disease. By James S. McLester, M.D., Professor of Medicine, Emeritus, University of Alabama and William J. Darby, M.D., Ph.D., Professor of Biochemistry, Vanderbilt University. Philadelphia. W. B. Saunders Company, 1952. ($10.00)

This textbook first appeared in 1927 and has been brought up-to-date over the years. It is one of the classics in nutrition. Nearly all the chapters have been re-written and the references used are of recent date. This has been carried out with the same precision and the authoritative approach of all the previous editions. Each chapter is written by an authority on the subject and goes to make up a series of many books in one.

The section on vitamins includes the more recent advances such as folic acid, vitamin B_{12}, and vitamin B_6. Especially noteworthy is the section on "Deficiency Diseases." The latest revision on food composition with tables of cholesterol values and low sodium diets is especially interesting and will be appreciated by doctors and students who read this book. Nothing of value has been added to the chapter "Obesity and Leanness" and this may very well be because there has been so little research done in this field.

A great deal of the work included in this textbook is based on the authors' extensive personal experience which makes this a very valuable contribution to the field of nutrition and diets. It is felt that this book should belong to every student and technician who is interested in the field of nutrition.

S. William Kalb, M.D.

Surgical Gynecology, Including Important Obstetric Operations; A Handbook of Operative Surgery. By J. P. Greenhill, M.D., Professor of Gynecology, Cook County Graduate School of Medicine; illustrated by Angela Bartenbach. Pp. 350. Chicago, Year Book Publishers, Inc., 1952. ($8.50)

Dr. Greenhill's handbook entitled "Surgical Gynecology" is a manual on gynecologic surgery including some obstetric operations. The volume is actually an atlas in which the operations are illustrated in semi-diagrammatic fashion using 101 plates. The drawings are in black and white, very clearly executed and carefully selected in proper sequence. It is possible to follow the operative procedure from a study of the pictures. These illustrations are particularly useful to the surgeon who desires to review the technical details of the operations described. One who is not proficient in gynecologic surgery cannot, however, use this atlas as a complete text by way of preparation for performing the operations.

A chapter on pre-operative and postoperative care serves as an introduction to the subject. Operations involving the vulva, perineum and vagina are then described. Abdominal operations described include all those performed on the uterus, tubes and ovaries and include, also, some operations which may be performed during gynecologic surgery as appendectomy and repair of bladder, ureter and bowel injuries.

The handbook has real merit particularly for the general practitioner who includes gynecologic surgery in his practice. It summarizes the experience of one of the leading gynecologists in this country and is portrayed graphically in concise form.

Robert Berman, M.D.

Practical Dermatology for Medical Students and General Practitioners. By George M. Lewis, M.D., F.A.C.P., Prof. of Clinical Medicine (Dermatology), Cornell University Medical College. Pp. 328. Phila. and London, W. B. Saunders Company, 1952. ($7.50)

This is the first original American text on dermatology to appear in this country in several years. A schematic presentation helps the reader in the search for material and its rapid assimilation. The discussion is always compact, impersonal and positive. The use of italics to emphasize salient points may be valuable for a student preparing for an examination, but on the whole proves distracting to the general reader. An admirable feature is the carefully selected groupings of photographs, clearly reproduced on paper of excellent quality.

As might be anticipated from the author's interest in this difficult subject the chapter on fungus infection is concisely presented. In therapeutics the emphasis is on conservatism with standard remedies such as ammoniated mercury in impetigo and Whitfield's ointment in fungus infections taking precedence over the new medications. However all the important proprietary preparations are included in the complete formulary.

An able expression of the principle of the calculated risk should make us doubly careful about the inconsidered use of potent, poorly understood drugs in the treatment of relatively benign conditions. This practical and eminently serviceable book can be highly recommended not only for the general practitioner but also for the dermatologist who would like a well-written, studious review on modern lines of an old and difficult subject.

Morris H. Saffron, M.D.

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI April, 1953 No. 4

CLINICAL AND HISTOPATHOLOGIC STUDY OF THE EFFECT OF CORTISONE AND CORTICOTROPIN ON TUBERCULOSIS

By Linden Wallner, M.D., J. Robert Thompson, M.D., and M. R. Lichtenstein, M.D., American Review of Tuberculosis, August, 1952.

A number of studies in animals have demonstrated that treatment with cortisone has an unfavorable effect upon tuberculosis. Trials of cortisone and corticotropin in human tuberculosis have been relatively few and have not included the histopathology of the tuberculous lesions while under this therapy. The purpose of the investigation reported here is to illustrate the effect of the hormones on the tuberculous lesion by means of biopsies of accessible mucous membrane lesions. It is presumed that the effects on tuberculous tissue should be essentially the same in these lesions as in the lungs.

Six patients with extensive pulmonary tuberculosis and sputum positive for *M. tuberculosis* were studied. All had laryngeal tuberculosis. In addition, one patient had tuberculous lesions of the hard palate with ulceration; and one had an ulcer in the region of a previously removed left tonsil. Although markedly ill, all of the patients were able to walk. Treatment with cortisone or corticotropin was carried out for periods of 10 to 22 days. Photographs and biopsies of the lesions were made at the beginning and at the end of treatment.

The clinical condition of the patients was followed by means of studies of the temperature, weight, expectoration and general condition. The intracutaneous reaction to tuberculin was determined before, during, and after treatment. Blood counts, special eosinophil counts, urinalyses, sputum studies, and roentgenograms of the chest were performed. Data on these patients are presented at the end of this abstract.

Subjectively the patients felt better and presented evidence of mild euphoria during therapy. Cough diminished and most of the patients gained weight. Fever was absent during therapy in five cases except for an occasional slight rise but recurred when therapy was discontinued. One case had irregular fever during therapy.

The serial roentgenograms of the lungs showed some clearing of the lesions at the end of treatment in two cases. The other four patients showed no significant changes. A temporary depression of reactivity to tuberculin occurred during treatment in half of the cases.

Photographs of the lesions revealed no definite evidence of improvement in the gross pathology. Examination of biopsy material at the end of treatment revealed increased inflammatory response, lessened limitation of tubercles, and increased numbers of tubercle bacilli. No definite clinical harm was observed in the patients in the present study as a result of the short courses of cortisone and corticotropin, nor was any difference in the effects produced by the two substances noted.

It thus appears that symptoms improved, but pathology progressed and the number of bacilli increased while under therapy with these hormones. There has been much speculation concerning the possibility of combining cortisone or corticotropin with streptomycin in the treatment of pulmonary tuberculosis. Thus far no benefit has been reported.

DATA ON SIX PATIENTS TREATED WITH CORTISONE OR CORTICOTROPHIN FOR TEN TO TWENTY-TWO DAYS

CASE NUMBER	RACE, SEX AND AGE	WEIGHT	DAILY TREATMENT	DURATION OF TREATMENT	EOSINOPHILS PER CU. MM.		EFFECT OF TREATMENT ON HISTOPATHOLOGY	GROSS APPEARANCE OF MUCOUS MEMBRANE LESION AFTER TREATMENT
					Before Treatment	After Treatment		
		pounds		*days*				
1	W. W., Negro male, 40 years	95	Cortisone, 100 mg. intramuscularly	14	?	3	Increased inflammatory reaction; less limitation of tubercles after treatment; no tubercle bacilli found before treatment; tubercle bacilli present after treatment	No change
2	W. R., Negro male, 37 years	102	Cortisone, 100 mg. intramuscularly	22	27	10		Worse: more swelling
3	F. A., Mexican male 29 years	107	Cortisone, 100 mg. 200 mg.	5 10	142	110 26		No change
4	W. M. B., Negro female 34 years	127	Corticotropin, 20 mg. intravenous drip	10	343	33	Inflammatory reaction slightly less after treatment; tubercle bacilli present before treatment (insufficient specimen for post-treatment examination for bacilli)	No significant change
5	L. K., white male, 33 years	106	Corticotropin, intravenous drip	12	153	25	Tub rcules atypical after treatment, with less giant cells; more tubercle bacilli after treatment	No change
6	N. E., white male, 51 years	103	Corticotropin, 50 mg. intramuscularly	10	102	29	Increased inflammatory reaction; more tubercle bacilli after than before treatment	No change

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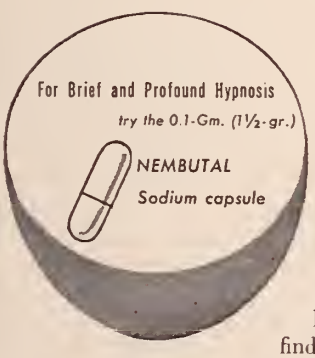
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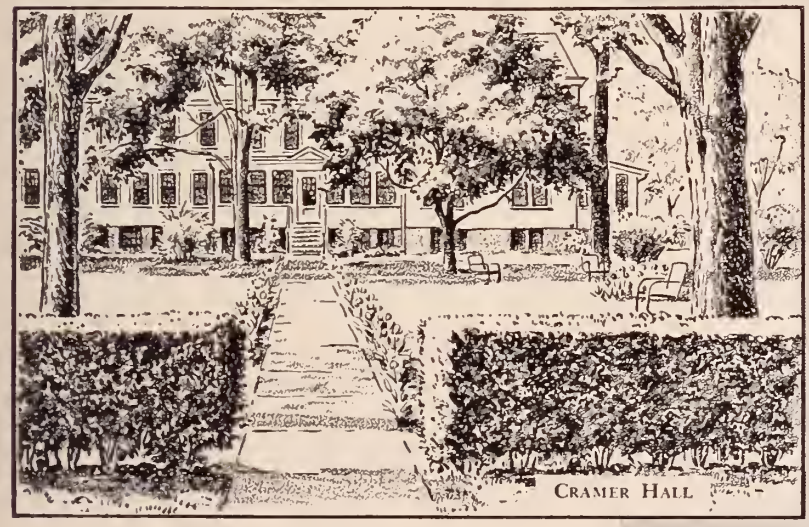
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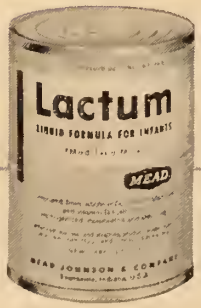
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1. Frost, L. H., and Jackson, R. L.: J. Pediat. 39: 585-592, 1951.



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OF

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CONTENTS—Pages 167 to 238

EDITORIALS— PAGE
President's Message 167
Annual Reports Issue 169
Have You Paid Your A.M.A. Dues? 169
PROGRAM OF THE ANNUAL MEETING—
Daily Schedule 170
General Session 171
Banquet 171
Social 171
Scientific Sessions 172
Agenda of the House of Delegates 175
Reference Committees 175
Special Events 176
Woman's Auxiliary 177
Educational Exhibits 178
Scientific Exhibits 179
Technical Exhibits 182
ANNUAL REPORTS 188
(Index to Annual Reports on page 187)
PROPOSED CHANGE IN CONSTITUTION AND BY-LAWS 194
BOOK REVIEWS 236
TUBERCULOSIS ABSTRACTS 237

Roster of Officers and Committees, Advertising Pages 3A-7A

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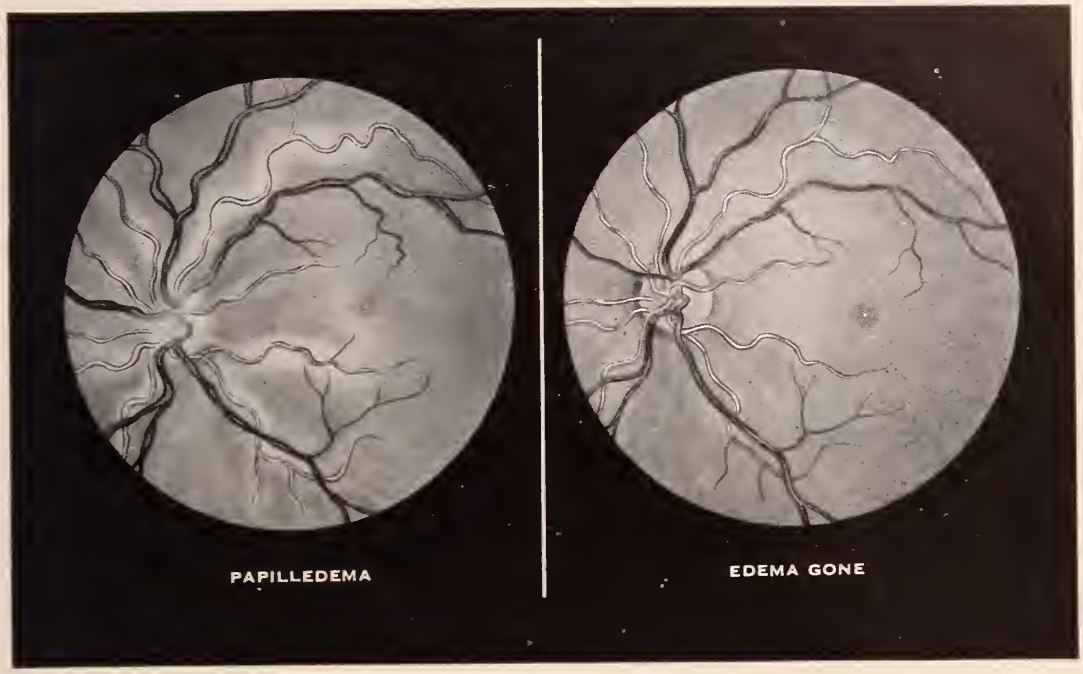
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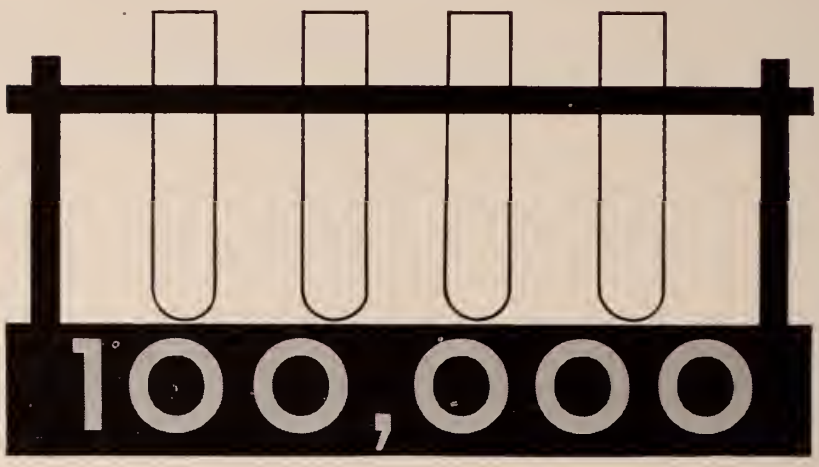
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1. Grimson, K. S.; Orgain, E. S.; Rowe, C. R., and Sieber, H. A.: J.A.M.A. *149*:215 (May 17) 1952.
2. Paton, W. D. M., and Zaimis, E. J.: Pharm. Reviews *4*:219 (Sept.) 1952.

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1. Blotner, H., and Marble, A.: New England J. Med. *245*:567 (Oct. 11) 1951.
2. Getting, V. A., and others: Diabetes *1*:194, 1952.
3. Wilkerson, H. L. C., and Krall, L. P.: J.A.M.A. *135*:209 (Sept. 27) 1947.

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protein "PICK ME UP" IN PREGNANCY

"In pregnancy, especially during the last trimester, a protein intake of at least 85 to 100 Gm. daily has been recommended."[1]

"There was a very definite correlation between a protein intake of 85 Gm. or more and the absence of abortion, less anemia of pregnancy, and a higher per cent of excellent babies as graded by the pediatrician."[2]

The problem, however, in pregnancy—as in many other conditions requiring "stepped up" protein intake—is one of appetite. Patients who require large amounts of protein are usually unable to eat great quantities of foods. A heaping tablespoonful of Essenamine is the protein equivalent of more than one fourth pound of beef.

Available in three farms:

Essenamine Powder Unflavored
7½ and 14 oz. glass jars.

Essenamine Compound Powder
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Smooth, Micro-atomized Protein Concentrate for Oral Use

Supplies 3 times as much protein as meat—weight for weight.

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1. Guerriero, W. F.: *Texas State Jour. Med.*, 45:274, May, 1949.
2. Dieckmann, William J.: *Quart. Rev. Obst. & Gynec.*, 10:14, Jan., 1952.



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A Clinical Report that merits your attention

"85.5% of the total cases were completely cured, from a clinical standpoint"

—FROM A RECENT REPORT ON MENNEN BABY MAGIC SKIN CARE IN THE TREATMENT OF AMMONIA DIAPER RASH.

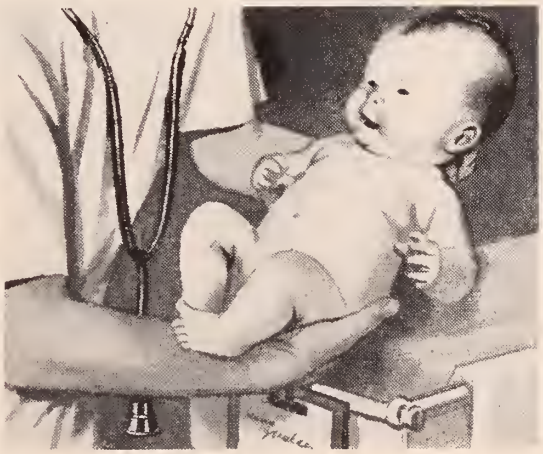
Six qualified investigators, working independently, reported on 117 cases of ammonia diaper rash, in which Mennen Baby Magic liquefied cream was the principal treatment prescribed. The patients ranged from two weeks to two years in age—the cases, from mild to severe, with a preponderance of moderate and severe rashes.

The results seem sufficiently impressive to warrant bringing them to your attention. 82 cases were completely cleared, 18 cases almost completely cleared within an average of 6.9 days. And 9 additional cases were noticeably improved! Only 8 cases failed to respond.

Rashes in the "improved" group and in the 8 failures tended to be of the eczematous type, and it was in this group that allergic tendencies became apparent during the course of treatment. In the 9 cases reported as "improved," the partial benefit is attributed to the emollient effect of the cholesterol type base in Baby Magic, as well as its protective effect against secondary staphylococcic and streptococcic infections.

As for method of treatment, it was extremely simple . . . merely the routine application of Baby Magic to the involved area after each diaper change, with a specially liberal application before putting on the last diaper for the night.

Because of this remarkable record, you'll be interested in knowing what the Baby Magic formula contains. Baby Magic is essentially an



emulsion of cholesterol and related sterols, with a small amount of lanolin. These elements are of animal origin and, therefore, physiologically akin to human tissue, being readily absorbed, and not acting as foreign substances.

"Purateen," another active ingredient, is a quaternary compound with the chemical name, Methylbenzethonium Chloride. Bacteriostatic against Staph. aureus and various streptococci, it shows exceptional anti-bacterial action against B. ammoniagenes and other urea splitting organisms in extremely weak dilutions. "Purateen" also makes Baby Magic an effective deodorant against noxious as well as ammonia-bred diaper odors.

It has been observed that Baby Magic heals more than just diaper rash. This fine liquefied cream has proved highly effective against chafing, chapping, urine scald, cradle cap, and prickly heat. Non-greasy, non-sticky, it is rapidly absorbed, leaving a soothing protective film over sensitive skin areas.

Baby Magic Skin Care is a product of the Mennen Company, baby specialist since 1880.

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Gantrisin is a sulfonamide so soluble that there is little danger of renal blocking and little or no need for alkalinization.

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Gantrisin not only produces a high blood level but also provides a wide antibacterial spectrum.

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Gantrisin is a relatively economical antibacterial agent.

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Gantrisin is a single drug—not a mixture of several compounds of fundamentally unrelated chemical structure—so that there is less likelihood of sensitization.

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(3,4-dimethyl-5-sulfanilamido-isoxazole)

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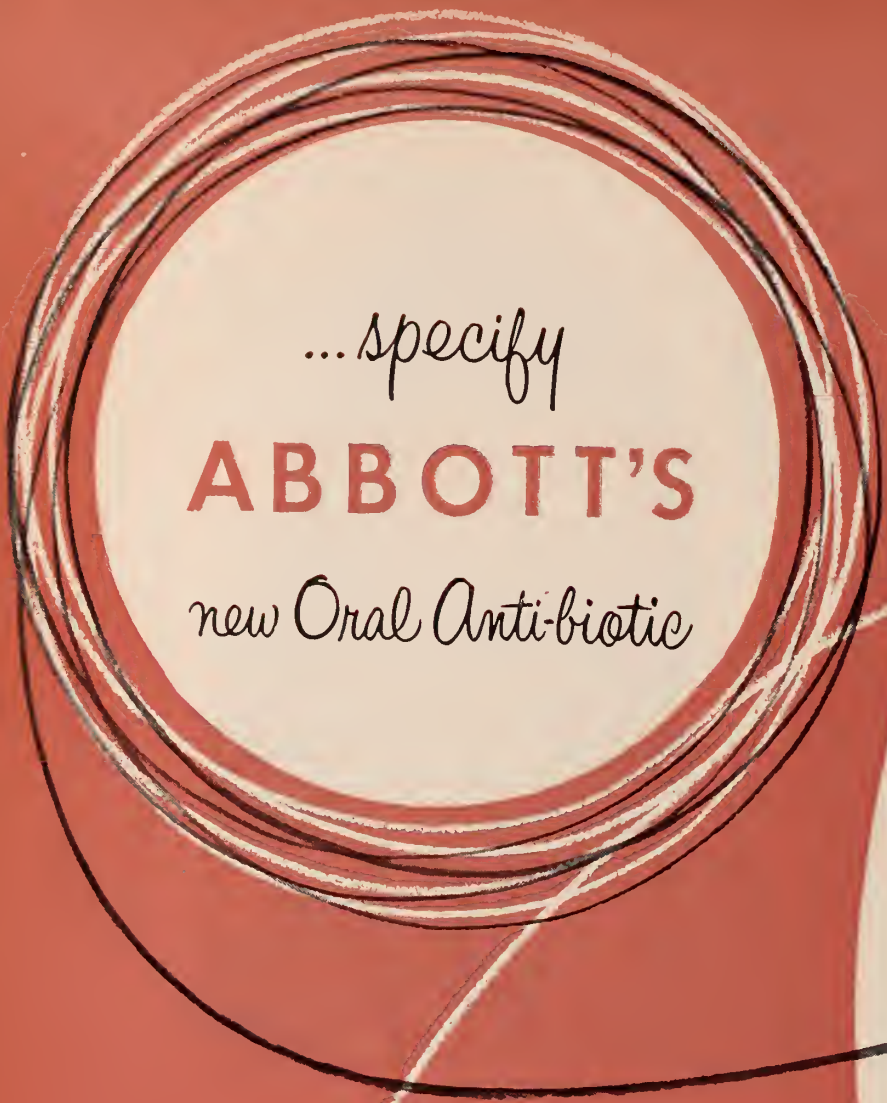
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1. McGuire et al. (1952), J. Antibiotics & Chemo., 2:281, June.
2. Heilman et al. (1952), Proc. Staff Meet. Mayo Clin., 27:385, July 16.
3. Haight and Finland (1952), New Eng. J. Med., 247:227, Aug. 14.

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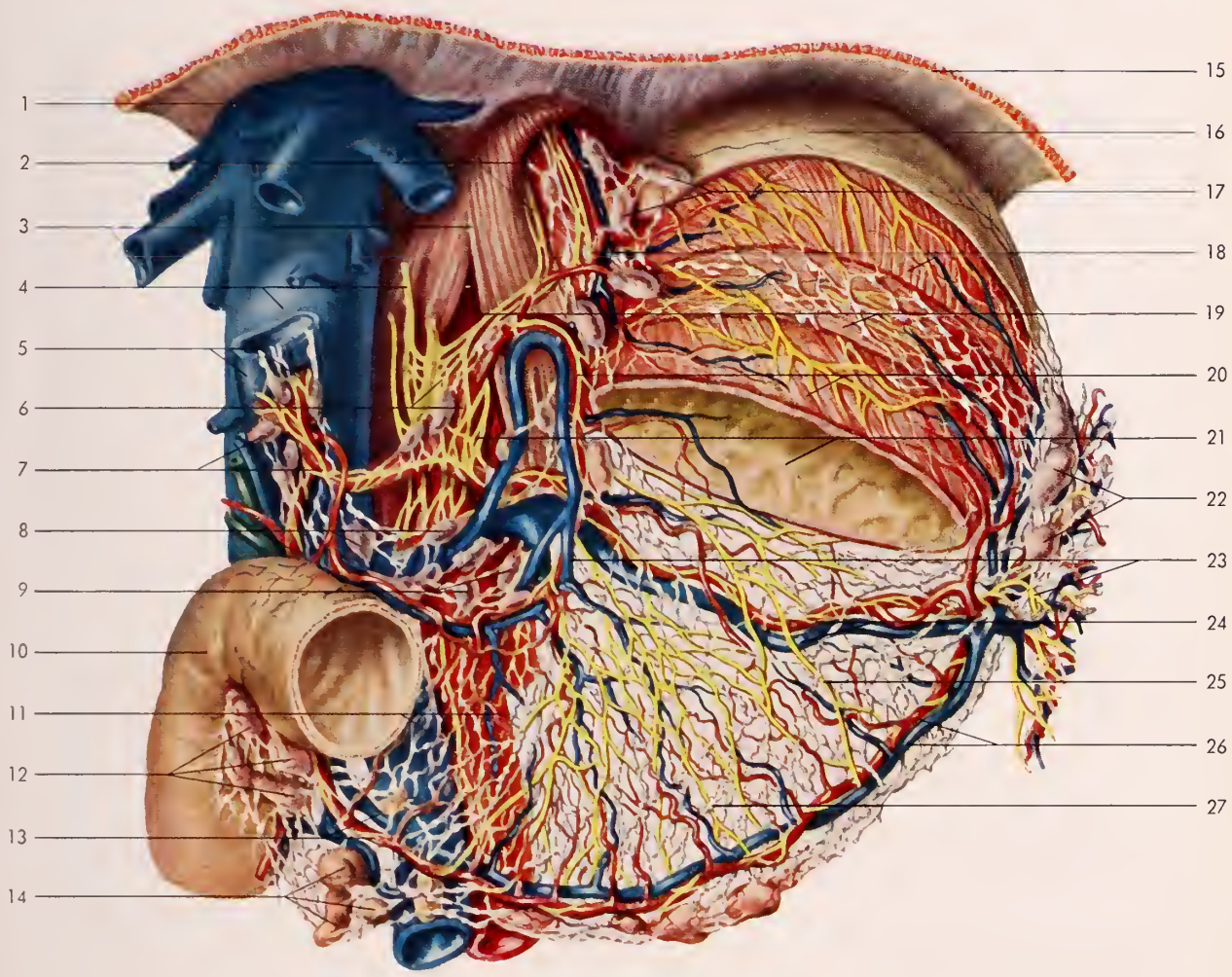
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1 Middle and left hepatic veins

2 Right vagus nerve and esophagus

3 Right hepatic vein and crura of diaphragm

4 Inferior vena cava and greater splanchnic nerve

5 Portal vein and hepatic artery

6 Celiac plexus and celiac artery

7 Hepatic lymph node and hepatic rami of vagus nerve

8 Gastroduodenal artery and suprapyloric lymph nodes

9 Superior gastric lymph nodes

10 Duodenum

11 Superior mesenteric artery and vein

12 Subpyloric lymph nodes

13 Right gastroepiploic artery and vein

14 Inferior gastric lymph nodes

15 Diaphragm

16 Serosa

17 Paracardial lymph nodes

18 Left vagus nerve and longitudinal muscular layer

19 Abdominal aorta and circular muscular layer

20 Left gastric artery and oblique muscular layer

21 Celiac rami of vagus nerve and gastric mucosa

22 Splenic lymph nodes

23 Left gastric (coronary) vein and splenic rami of vagus nerve

24 Splenic artery and vein

25 Gastric rami of vagus nerve

26 Left gastroepiploic artery and vein

27 Gastric lymphatic plexus

This is one of a series of paintings for Lederle by Paul Peck, illustrating the anatomy of various organs and tissues of the body which are frequently attacked by infection, where aureomycin may prove useful.

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In perforated viscus,
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often acts promptly to prevent
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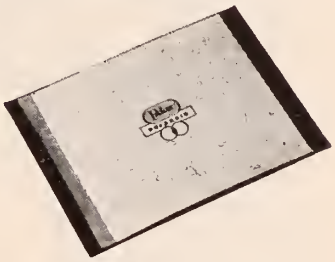
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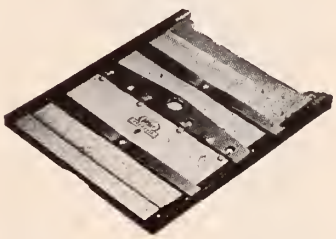
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*Perloff, W. H.: Am. J. Obst. & Gynec. *58*:684 (Oct.) 1949.

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Dietary recommendations for three levels of sodium restriction are given. In all of them, meat is an important constituent of the diet. In the diet providing moderate sodium restriction (0.5 to 1.5 Gm. of sodium), 4 to 6 ounces of unsalted meat, fish or fowl are allowed. In severe restriction (0.5 Gm. sodium), 3 to 4 ounces of meat are permitted daily. The weight reduction-moderate sodium restriction diet calls for 5 to 6 ounces of meat daily.

This booklet again emphasizes the valuable application of meat in the dietary management of cardiac disease, hypertension, and obesity. Since, as the manual emphasizes, infectious diseases and such scourges as typhoid fever have now been controlled with antibiotics, chemotherapeutic agents and modern sanitation, "many physicians and scientists consider nutrition the most important environmental factor in health."

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---

*Food for Your Heart, a Manual for Patient and Physician, Department of Nutrition, Harvard School of Public Health, Harvard University, The American Heart Association, Inc., New York, 1952. Copies available through local Heart Association.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.



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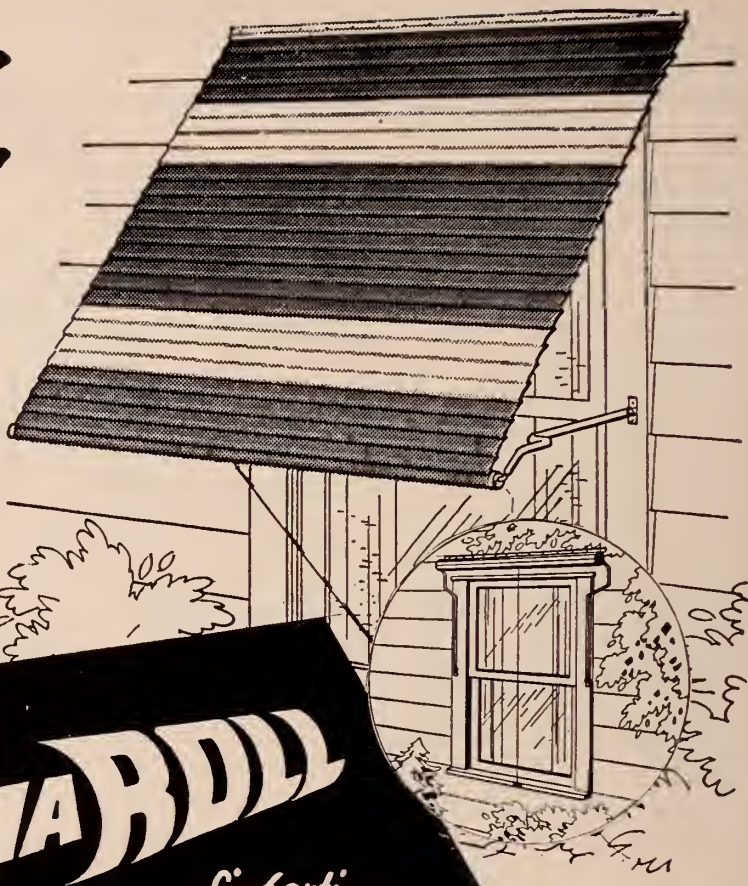
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COBALT	0.006 mg.	CHOLINE	200 mg.
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FLUORINE	3.0 mg.	*NIACIN	6.7 mg.
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SODIUM	560 mg.	*VITAMIN D	420 I.U.
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*CARBOHYDRATE . . . . . 65 Gm.
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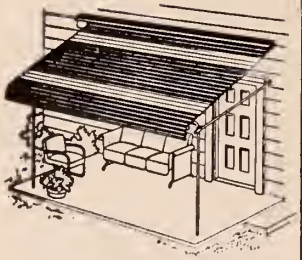
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"Over-all we have experienced a 50% diagnostic improvement in the examination, which we are convinced is attributable directly to the larger quantity of iodine available for excretion."

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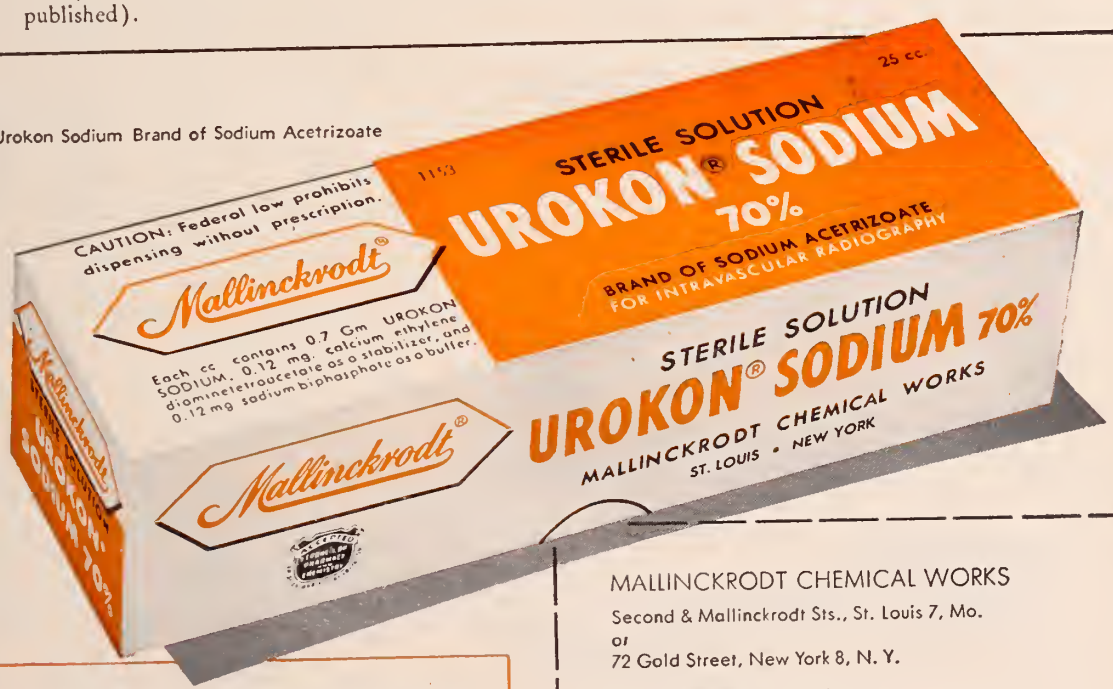
SAFETY—Barry and Rose[3], made the following observations on 1160 cases:

"In the tabulation of this large series of cases, the observers became lax in recording the presence or absence of reaction because of the marked absence of toxic reactions. For this reason only 556 of the total are so noted. Of this group, 497 or 89.5% had no reaction."

[1]Zink, O. C.. Routine Clinical Experiences Using Urokon 70% in Intravenous Urography (Private Report dated May 12, 1952).
[2]Nesbit, R. M. and Nesbitt, T. E.: Experiences with High Concentration Urokon for Pyelography. Univ. of Mich. Med. Bull. *18*:225 (1952).
[3]Barry, C. N. and Rose, D. K.: Urokon Sodium 70% in Excretory Urography, J. Urol. (to be published).

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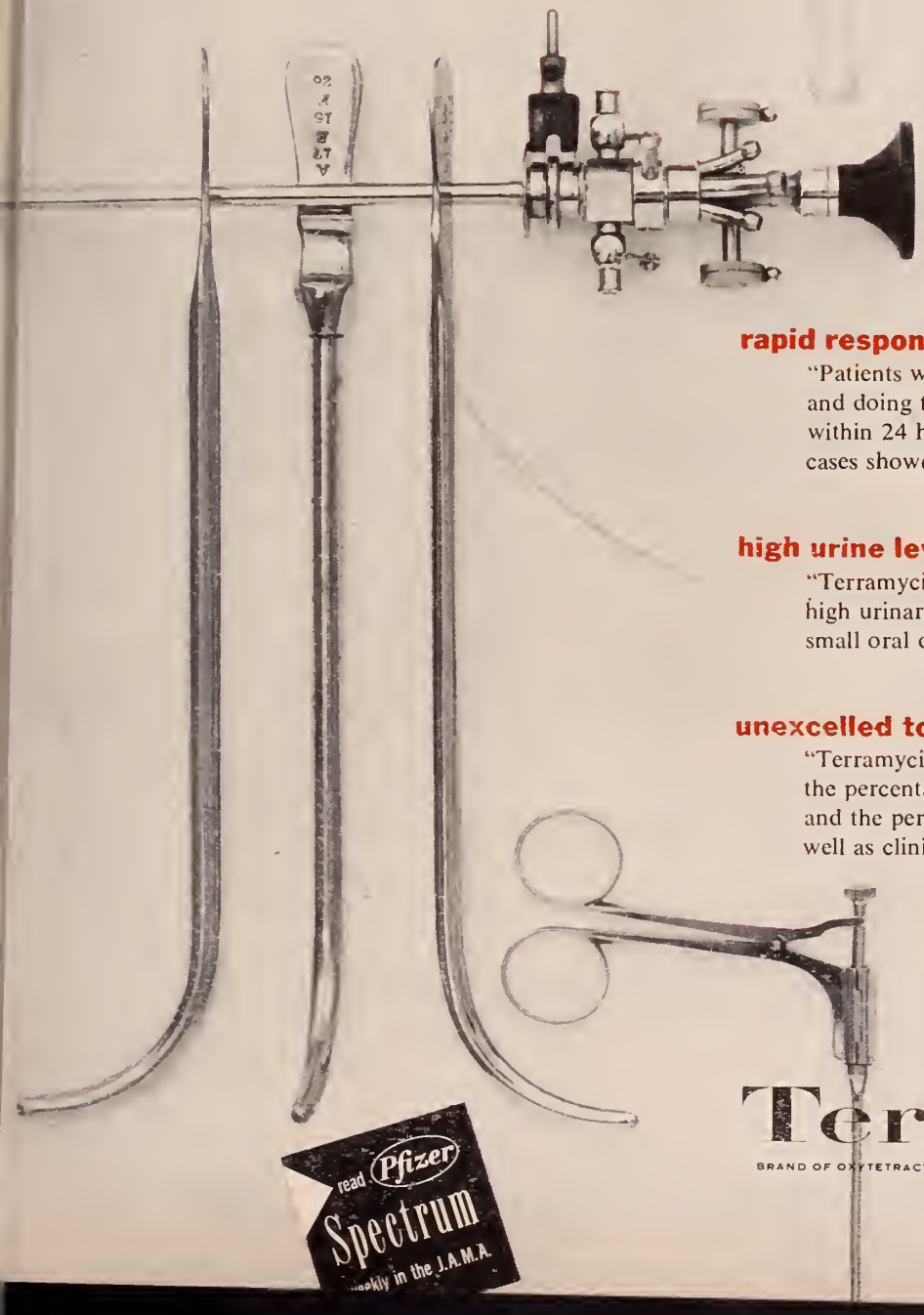
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1. Conod. M. A. J. 66:151 (Feb.) 1952.
2. J. Urol. 67:762 (May) 1952.
3. Ibid. 69:315 (Feb.) 1953.

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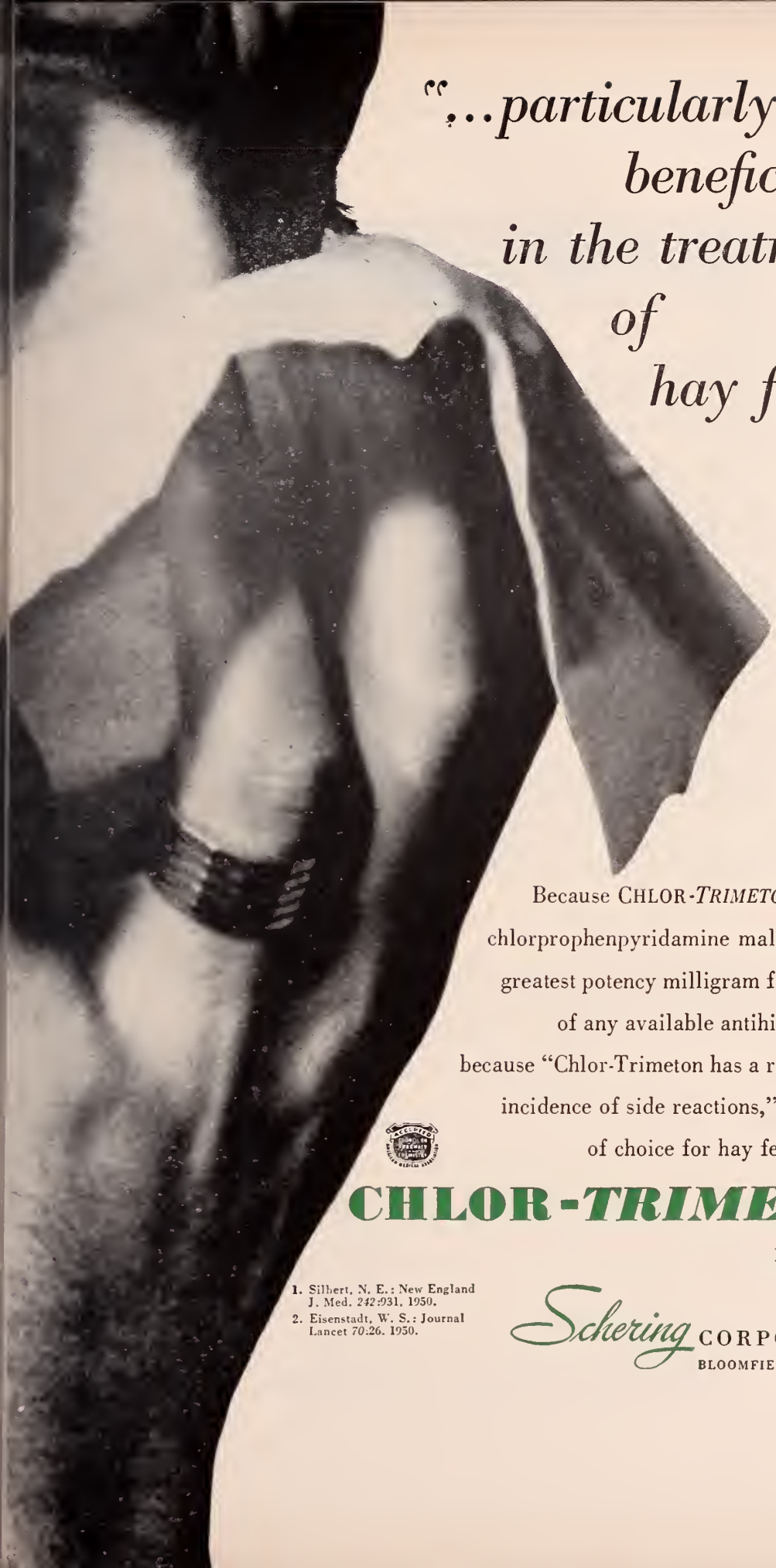
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1. Silbert, N. E.: New England J. Med. 242:931, 1950.
2. Eisenstadt, W. S.: Journal Lancet 70:26. 1950.

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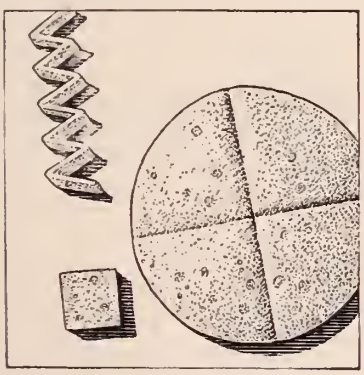
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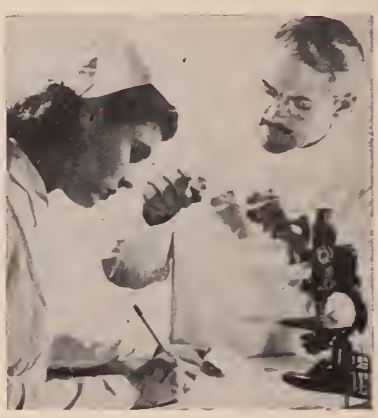
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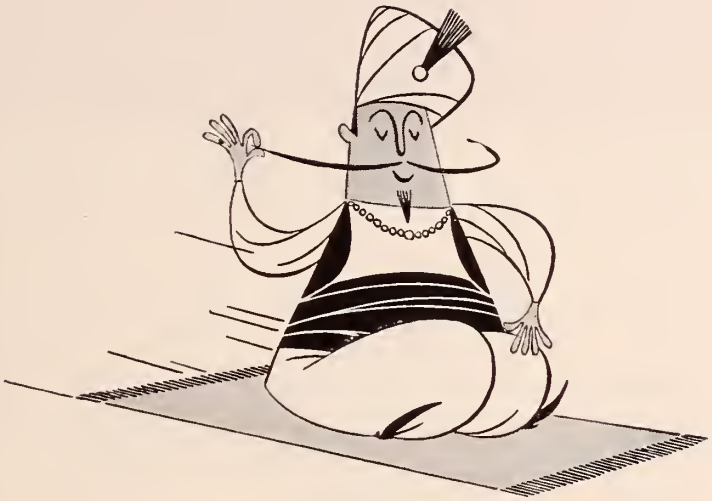
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For sustained contraction of the postpartum uterus

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Volume 50
Number 5

THE JOURNAL
OF
THE MEDICAL SOCIETY OF NEW JERSEY

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PRESIDENT'S MESSAGE

ANSWERING OUR CHALLENGES

Last May in my inaugural address I stated, "There are ten challenges facing the medical profession in our state today. These challenges we will accept—some of them can be answered this year while others will take longer, but with the help of each member, the Woman's Auxiliary, and all interested professional and non-medical groups, they will all be answered in the not too far future".

I am happy to say that the prediction which I made on that occasion has come true to a great degree. This has been made possible only by the active interest and cooperation of our members, officers, Board of Trustees, chairmen of the committees, Woman's Auxiliary, many non-medical friends, our very efficient executive officer and our competent administrative secretary and her willing staff. I am deeply grateful to them for their untiring help.

Let me remind you of these challenges and tell you how we have attempted to answer them.

First, providing an adequate number of physicians. Our Physicians Placement Bureau has been functioning actively this year. Requests for information concerning practicing in our state have been expedited and physicians have been encouraged to practice in the rural areas. The publication of the new directory will help implement the work of this committee.

Second, making more hospital beds available. Our Hospital Relationships Committee has conducted a pilot study of this problem. Reports thus far are most encouraging, but it will take the cooperation of all our members in mak-

ing their patients' stay in the hospitals as short as possible to effect a successful solution.

Third, providing adequate public health facilities. Local Councils for Public Health are being formed throughout the state, assisted by county medical societies and their woman's auxiliaries. Their interest must continue in order that these councils will be successful and expand.

Fourth, caring for the chronically ill. Interest in this problem is growing in our county medical societies. Local Services for the Chronically Ill are being set up, and Homemaker's Services have been established in many counties throughout the state.

Fifth, stepping up medical research. A Medical Research Committee has been functioning this year. This committee will serve as a clearing house for projected research facilities for our members, hospitals, and foundations. It will act as an information center for determining the value of newer drugs and antibiotics and will serve those members wishing publication of scientific articles.

Sixth, helping to establish a medical-dental school in New Jersey. A professional adviser has been engaged to stimulate organizations and agencies to realize the great need for such a school in our state and the advantages that it will bring to good health programs for our citizens. The Citizens' Committee will do much to encourage legislation which will enable our dream to become a reality.

Seventh, providing voluntary insurance for medical costs. Our Medical-Surgical Plan has enrolled its one millionth subscriber during the past year. With greater participation, understanding, and encouragement on the part of our members this Plan will continue to be our most important answer to compulsory health insurance proposals.

Eighth, furnishing round-the-clock services for the acutely ill. We have launched a worthwhile program to meet this, our most important, challenge. Emergency medical services have been established in almost every county society. The new orientation programs for physicians entering county societies and the state society will make these members realize their responsibility for furnishing this care. A program started in the Essex County Medical Society making it mandatory for associate members to answer emergency calls before being accepted as regular members should be started in every other county medical society.

Ninth, adjusting our fees to the patient's income. Patients are offered the services of our Judicial Council when satisfaction is not obtained at a local county council. Here they may have recourse for help when fees seem too high or the services rendered by our members are questionable.

Tenth, improving our public relations. We have endeavored to improve our relations with the public by constantly reminding our members during the year that "Public Relations for medicine means Personal Responsibility for you" —our slogan which is being used nationally. The membership plaque will be a reminder to the physician whose wall it adorns that he is a member of a very honored medical society which has high ideals of service. Since he enjoys membership in such a society, he must live up to its lofty traditions.

Much work has been accomplished this year, still more lies ahead for each member. The outlook for the future of our society is good if we all realize our responsibilities. With continued interest and guidance from our leaders, I am certain that The Medical Society of New Jersey will be foremost in answering the challenges which are presented to organized medicine throughout the country.

HARROLD A. MURRAY, M.D.

ANNUAL REPORTS ISSUE

Each year the May issue of THE JOURNAL is devoted entirely to the complete program of the annual meeting and the annual reports of the Society. Those members who plan to come to Atlantic City in May are advised to familiarize themselves with the program, so that they will know in advance what section meetings, exhibits, and general meetings they wish to attend.

This year's program of the Society was based on the ten challenges to medicine laid down by Dr. Murray in Atlantic City last May. The reports speak for themselves in recounting what has been accomplished, and in outlining what remains for the future. However, brief mention should be made of some of our outstanding achievements of the 1952-53 fiscal year.

The Better Breakfast Week promoted by our society and numerous allied agencies, was a notable success, and brought us a great deal of good will. It was widely hailed by leaders in industry, education, and home economics as a real contribution to better nutritional standards for all.

The public relations program showed continued activity, one result of which was the attractive office plaque sent to every member of the Society, which was mailed out during the month of March. This plaque should make it clear to all patients that its exhibitor places their medical needs above all other considerations.

The report of the State Board of Medical Examiners is worth reading, if for no other reason than to acquaint ourselves with the vigilance of this group in protecting the public from unscrupulous and unlicensed practitioners of other so-called healing arts. It also serves to show how our state professional group is growing by the addition to our communities of many recently licensed physicians, whom we welcome warmly.

The county medical society reports indicate that our interests are being carefully guarded on the local, as well as the state level. The fine array of scientific programs is an expression of our continued interest in recent advances in medicine.

Each report is worth reading, because each contains something of interest to all. These reports indicate how diligently and conscientiously every officer of the Society and every committee member applies himself to the betterment of medicine in this state. To this zealous group of men we all owe our thanks.

HAVE YOU PAID YOUR A.M.A. DUES?

The American Medical Association Annual Session will be held in New York City from June 1 to June 5, 1953. The headquarters, scientific and technical exhibits, and other meetings will be at the Grand Central Palace, 44th and Lexington Avenues.

To avoid the usual congestion at the registration windows and to save yourself trouble and delay the American Medical Association is issuing advance-registration cards which will make it possible to register quickly instead of waiting in line to have your record checked with the membership roster.

To register it is necessary for you to have a pocket card showing that you have paid your membership dues in the American Medical Association for 1953. If you have not already sent in your check to cover 1953 dues, we suggest that you do so at once, to give us an opportunity to forward the payment to the A.M.A. in time to have a pocket card and an advance-registration card issued to you.

THE 187th ANNUAL MEETING
OF
THE MEDICAL SOCIETY OF NEW JERSEY
HADDON HALL, ATLANTIC CITY
May 17, 18, 19 and 20, 1953

DAILY SCHEDULE

SUNDAY, MAY 17, 1953

10:00 a. m.—Registration Opens
Lounge Floor

11:00 a. m.—Board of Trustees
Bakewell Room, First Floor

1:00 p. m.—Luncheon: Board of Trustees
Rowsley Room, First Floor

2:30 p. m.—House of Delegates
Viking Room, Thirteenth Floor

6:30 p. m.—Auxiliary Fellowettes' Dinner (by invitation only)
Rowsley Room, First Floor

8:00 p m.—Nominating Committee
Bakewell Room, First Floor

MONDAY, MAY 18, 1953

9:00 a. m.—Exhibits Open—Educational, Scientific, Technical
Lounge Floor

10:00 a. m.—Section on Heart Diseases
Vernon Room, Lounge Floor
Section on Surgery
Rutland Room, First Floor
Reference Committee "A"
Green Room, Thirteenth Floor
Reference Committee "B"
Room 1333, Thirteenth Floor
Reference Committee "C"
Room 1337, Thirteenth Floor
Reference Committee "D"
Room 1335, Thirteenth Floor

12:30 p. m.—House of Delegates (Election)
Viking Room, Thirteenth Floor

1:00 p. m.—Auxiliary Pre-Convention Board Meeting
West Room, Thirteenth Floor
Luncheons:
Section on Heart Diseases
Room 1344, Thirteenth Floor
New Jersey Chapter, American College of Surgeons
Carolina Room, Chalfonte Hotel

2:00 p. m.—Section on Urology
Vernon Room, Lounge Floor
Section on Rheumatism
Rutland Room, First Floor
Reference Committee "E"
Room 1333, Thirteenth Floor
Reference Committee on Miscellaneous Business
Green Room, Thirteenth Floor
Reference Committee on Constitution and By-Laws
Room 1335, Thirteenth Floor
Reference Committee on Resolutions and Memorials
Room 1337, Thirteenth Floor

3:30 p. m.—Auxiliary Informal Tea
West Room, Thirteenth Floor

4:30 p. m.—New Jersey State Council for Improvement of School Health Services
Viking Room, Thirteenth Floor

6:00 p. m.—Dinners:
New Jersey Branch, American Medical Women's Association
Rowsley Room, First Floor
Technical Exhibitors (by invitation only)
Rutland Room, First Floor

8:00 p. m.—General Session
Vernon Room, Lounge Floor

TUESDAY, MAY 19, 1953

9:00 a. m.—Auxiliary General Session
West Room, Thirteenth Floor

9:30 a. m.—House of Delegates
Viking Room, Thirteenth Floor

12:30 p. m.—Luncheons:
Woman's Auxiliary
West Room, Thirteenth Floor
New Jersey Allergy Society
Rowsley Room, First Floor

2:00 p. m.—Section on General Practice
Rutland Room, First Floor
Section on Allergy
Viking Room, Thirteenth Floor
Auxiliary General Session (continued)
West Room, Thirteenth Floor

6:30 p. m.—Banquet
Vernon Room, Lounge Floor

10:00 p. m.—Social—Courtesy of The Mennen Company
Rutland Room, First Floor

WEDNESDAY, MAY 20, 1953

9:00 a. m.—Breakfast: Woman's Auxiliary
West Room, Thirteenth Floor

9:30 a. m.—Section on Gastro-Enterology and Proctology
Vernon Room, Lounge Floor
Section on Chest Diseases
Rutland Room, First Floor

10:00 a. m.—Auxiliary Post-Convention Board Meeting
West Room, Thirteenth Floor

12:00 noon—Luncheons:

Section on Chest Diseases
Mandarin Room, Thirteenth Floor

Section on Neuropsychiatry
Room 1344, Thirteenth Floor

Section on Dermatology
Room 1333, Thirteenth Floor

Board of Trustees
Bakewell Room, First Floor

2:00 p. m.—Section on Medicine
Rutland Room, First Floor

Section on Radiology
Viking Room, Thirteenth Floor

Section on Dermatology
West Room, Thirteenth Floor

3:30 p. m.—Exhibits Close
Lounge Floor

4:30 p. m.—Registration Closes
Lounge Floor

GENERAL SESSION

Monday Evening, May 18, 1953

8:00 p. m.

Vernon Room, Lounge Floor

Presiding: Dr. Harrold A. Murray, President

National Anthem

Invocation:
Reverend Harvey Bennett, D.D., The First Presbyterian Church, Atlantic City

Grant to Americal Medical Education Foundation
Presentation: Dr. Harrold A. Murray
Acceptance: Dr. George F. Lull

Musical Selections

Inaugural Address
Dr. Henry B. Decker, President-Elect

Solo
AMERICA FACES FORWARD

Ushers: Atlantic City Hospital Nurses

Music: Harold Ferrin and Ensemble

An open meeting for all members of the Society and the Woman's Auxiliary, representatives of the allied professions, and the press.

BANQUET

Tuesday Evening, May 19, 1953

6:30 p. m.

Vernon Room, Lounge Floor

honoring

President and Mrs. Harrold A. Murray

Toastmaster: Dr. Henry H. Kessler

Invocation: Reverend Harrold A. Murray

Welcome: Mrs. Edward H. Dyer, President, Woman's Auxiliary

Introductions: Mrs. Frank S. Forte, President-Elect, Woman's Auxiliary

Dr. Henry B. Decker, President-Elect

Presentation of Fellow's Key:
To: Dr. Harrold A. Murray, President
By: Dr. Sigurd W. Johnsen, Immediate Past-President

Entertainment:
The Doctors' Chorus of the Essex County Medical Society

Music:
Harold Ferrin and Ensemble

SOCIAL

10:00 p. m.
Rutland Room, First Floor

honoring

President and Mrs. Harrold A. Murray
Courtesy of The Mennen Company

SCIENTIFIC SESSIONS

Monday Morning, May 18, 1953

SECTION ON HEART DISEASES

Louis F. Albright, M.D., Chairman, Asbury Park
Harold K. Eynon, M.D., Secretary, Camden

Vernon Room, Lounge Floor

10:00 a. m.

Indications for Surgical Sympathectomy in the Treatment of Peripheral Vascular Disease of the Extremities

Stuart Z. Hawkes, M.D., Chief of Vascular Clinic, Presbyterian Hospital, Newark.

Discussor: Morton F. Trippe, M.D., Asbury Park.

10:40 a. m.

Current Views on the Treatment of Myocardial Infarction

Robert L. Levy, M.D., Professor of Clinical Medicine, College of Physicians and Surgeons, Columbia University, New York City.

Discussor: Paul K. Boyer, M.D., Summit.

11:40 a. m.

Selection of Cases for Mitral Commissurotomy

Nicholas A. Antonius, M.D., Director of Department of Cardiology, St. Michael's Hospital, Newark.

Discussor: Harry Kaplan, M.D., Trenton.

SECTION ON SURGERY

H. Wesley Jack, M.D., Chairman, Camden
Otto R. Holters, M.D., Secretary, Asbury Park

Rutland Room, First Floor

10:00 a. m.

Symposium—Emergency Treatment of Accidental Injuries Occurring on the Highways of the State of New Jersey From the Time of Their Inception Until Twenty-four Hours After Admission to the Hospital.

Moderator: Earl J. Halligan, M.D., Director of Surgery, Medical Center, Jersey City.

Injuries to the Skeletal System

Spencer T. Snedecor, M.D., Director of Orthopedic and Traumatic Surgery, Hackensack Hospital, Hackensack.

Head Injuries

Richard D. Swain, M.D., Attending Neurosurgeon, Presbyterian Hospital, Newark.

Intra-Abdominal Injuries

James H. Mason, III, M.D., Surgical Chief, Atlantic City Hospital, Atlantic City.

Chest Injuries

George N. J. Sommer, Jr., M.D., Thoracic Surgeon, St. Francis Hospital, Trenton.

10:50 a. m.

Pancreatitis

Andrew F. McBride, M.D., Attending Surgeon, St. Joseph's Hospital, Paterson.

11:10 a. m.

Symposium—Cancer

Moderator: George T. Pack, M.D., Clinical Professor of Surgery, New York Medical College, New York City.

Management of Sarcomas of the Soft Somatic Tissues

George T. Pack, M.D.

Management of Pigmented Moles and Malignant Melanoma

Isabel M. Scharnagel, M.D.

Management of Cancers of the Oral Cavity and Nasal Accessory Sinuses

John Conley, M.D.

Recent Trends in the Management of Leukemia and Malignant Lymphomas

John S. LaDue, M.D.

Monday Afternoon, May 18, 1953

SECTION ON UROLOGY

Robert L. McKiernan, M.D., Chairman, New Brunswick
George W. Irmisch, M.D., Secretary, Trenton

Vernon Room, Lounge Floor

2:00 p. m.

Giant Infected Renal Cyst

Raul R. Betancourt, M.D., Attending Urologist, Cooper Hospital, Camden.

2:20 p. m.

The Differential Diagnosis of Abdominal Masses

Gershom J. Thompson, M.D., Section on Urology, Mayo Clinic, Rochester, Minn.

3:00 p. m.

Postsurgical Urinary Suppression—Newer Aspects of Cause and Treatment

Samuel E. Kramer, M.D., Attending Urologist, Perth Amboy General Hospital, Perth Amboy.

Co-Author: Bernard M. Kramer, M.D., Assistant Attending Urologist, Perth Amboy General Hospital, Perth Amboy.

3:20 p. m.

Embryonal Mixed Tumors of the Kidney

John K. DeVries, M.D., Attending Urologist, Orange Memorial Hospital, Orange.

3:40 p.m.

Idiopathic Hemorrhagic Infarction of the Testicle in the Newborn

Anthony R. Fernicola, M.D., Associate Attending Urologist, Clara Maass Memorial Hospital, Newark.

SECTION ON RHEUMATISM

IRVING L. SPERLING, M.D., Chairman, Newark
W. ALAN WRIGHT, M.D., Secretary, Montclair

Rutland Room, First Floor

2:00 p. m.

Current Concepts on Rheumatic Fever Prevention
Henry L. Drezner, M.D., Chief of Cardiology, McKinley Hospital, Trenton.
Discussor: Alfred D. Dennison, M.D., Newark.

2:30 p. m.

The Principles of Management of Rheumatoid Arthritis; Long-Term Effects of Cortisone and ACTH
Harry M. Margolis, M.D., Assistant Professor of Medicine, University of Pittsburgh School of Medicine, Pittsburgh.
Discussor: Herman H. Tillis, M.D., Newark.

3:30 p. m.

The Evaluation of Butazolidin and Compound F in Arthritis
John W. Gray, M.D., Arthritis Clinic, New Jersey Orthopaedic Hospital, Orange.
Co-Author: Evelyn Z. Merrick, M.D., Arthritis Clinic, New Jersey Orthopaedic Hospital, Orange.
Discussor: Cyril M. Canright, M.D., Cranford.

4:00 p. m.

The Relationship of Arthritis and the Collagen Diseases
Irving L. Sperling, M.D., Arthritis Service, St. Barnabas Hospital, Newark.
Discussor: Clarence B. Whims, M.D., Atlantic City.

Tuesday Afternoon, May 19, 1953

SECTION ON GENERAL PRACTICE

SIDNEY D. BECKER, M.D., Chairman, Keyport
RICHARD R. CHAMBERLAIN, M.D., Secretary, Maplewood

Rutland Room, First Floor

2:00 p. m.

Functional Uterine Bleeding
Robert B. Greenblatt, M.D., Professor of Endocrinology, Medical School of Georgia, Augusta, Ga.
Discussors: Samuel G. Berkow, M.D., Perth Amboy.
Richard A. Cupaiuoli, M.D., Maplewood.

2:50 p. m.

Hypertension
Joseph I. Echikson, M.D., Attending Physician, Newark City Hospital, Newark.
Discussors: Vincent R. Campana, M.D., Jersey City.
Sol Gurshman, M.D., Metuchen.

3:40 p. m.

The Use of Trilene in Obstetrics
John S. Madara, M.D., Active Staff, Salem County Memorial Hospital, Salem.
Co-Author: Benjamin J. Libien, M.D., Chief Anesthetist, Salem County Memorial Hospital, Salem.
Discussor: Seymour Schotz, M.D., Philadelphia, Pa.

SECTION ON ALLERGY

LEWIS W. BROWN, M.D., Chairman, Newark
WILLIAM B. NEVIUS, M.D., Secretary, East Orange

Viking Room, Thirteenth Floor

2:00 p. m.

The Diagnosis and Treatment of Asthma in Infancy
William P. Buffum, M.D., Providence, R. I.
Discussor: William B. Nevius, M.D., East Orange.

2:45 p. m.

Recent Studies in Tobacco Allergy
Frank L. Rosen, M.D., Chief, Allergy Clinic, Newark City Dispensary, Newark.
Discussor: Jacob Schmukler, M.D., Newark.

3:05 p. m.

Business Session.

3:30 p. m.

Clinical Aspects of New Jersey Allergy Society's Study of Mold Content of Air.
Nathan Schaffer, M.D., Chief, Allergy Clinic, Orange Memorial Hospital, Orange.
Edward E. Seidmon, M.D., Plainfield, Attending Allergist, Veterans Administration Regional Office, Newark.

4:00 p. m.

Use of a Purified Non-Protein Bacterial Component, Pyromen, in Allergic Conditions
Sol Aronoff M.D., Chief, Allergy Clinic, Medical Center, Jersey City.
Discussor: Alvan L. Barach, M.D., New York City.

Wednesday Morning, May 20, 1953

SECTION ON GASTRO-ENTEROLOGY AND PROCTOLOGY

SAMUEL H. RUBIN, M.D., Chairman, Asbury Park
S. WILLIAM KALB, M.D., Secretary, Newark

Vernon Room, Lounge Floor

9:30 a. m.

Recent Developments in the Diagnosis and Treatment of Infectious Hepatitis
David Schwimmer, M.D., Associate Physician in Medicine and Research, New York Medical College, Flower and Fifth Avenue Hospitals, New York City.

10:00 a. m.

Diagnosis and Treatment of Ileocolitis
J. Arnold Bargen, M.D., Division of Medicine, Mayo Clinic, Rochester, Minn.

10:40 a. m.

Business Session.

11::00 a. m.

Symposium—Upper Gastro-Intestinal Bleeding
Moderator: Samuel H. Rubin, M.D., Assistant Attending Physician, Monmouth Memorial Hospital, Long Branch.

1. J. Arnold Bargen, M.D., Mayo Clinic.
2. David Schwimmer, M.D., New York Medical College.
3. Andrew J. Klein, M.D., Attending Gastroenterologist, St. Michael's Hospital, Newark.
4. Isaac Gelber, M.D., Attending Gastroenterologist, St. Elizabeth Hospital, Elizabeth.

SECTION ON CHEST DISEASES

Samuel Cohen, M.D., Chairman, Jersey City
William C. Douglass, M.D., Secretary, Bernardsville

Rutland Room, First Floor

9:30 a. m.

Latest Observations on the Chemotherapy of Tuberculosis with Isoniazide

A. Experimental Aspects of Drug Resistance of Tubercle Bacilli
Robert J. Schnitzer, M.D., Chief, Chemotherapy Laboratory, Research Department, Hoffmann-LaRoche, Inc., Nutley.

B. Results in Tuberculosis of Bones and Joints
Leonard E. Kremer, M.D., Orthopedic Surgeon, Barnert Memorial Hospital, Paterson.

C. Results in Pulmonary Tuberculosis
Irving Selikoff, M.D., Associate Attending Physician, Barnert Memorial Hospital, Paterson.

D. General Discussion

10.45 a. m.

Progess in Thoracic Surgery

A. Pulmonary Resection—in Tuberculous and Non-Tuberculous Diseases—Indications and Results
Herbert C. Maier, M.D., Director of Surgery, Lenox Hill Hospital, New York City.
Discussors: Frank Bortone, M.D., Jersey City.
George N. J. Sommer, Jr., M.D., Trenton.

B. Revascularization of the Heart for Coronary Artery Disease
Anthony D. Crecca, M.D., Thoracic Surgeon, St. Michael's Hospital, Newark.
Discussor: Alfred Henderson, M.D., Long Branch.

C. General Discussion

Wednesday Afternoon, May 20, 1953

SECTION ON MEDICINE

Clarence B. Whims, M.D., Chairman, Ventnor
Carroll M. Leevy, M.D., Secretary, Jersey City

Rutland Room, First Floor

2:00 p. m.

Management of Diabetes During Acute Complications
Garfield G. Duncan, M.D., Director, Medical Division of Pennsylvania Hospital, Philadelphia, Pa.

2:40 p. m.

Iatrogenic Meningitis
Milton Cutler, M.D., Hammonton.
Co-Author: Paul Cutler, M.D., Assistant Chief of Medical Service, Atlantic City Hospital, Atlantic City.

3:00 p. m.

Business Session.

3:30 p. m.

Advancements and the Treatment of Gout
Peter J. Warter, M.D., Head of Department of Medicine, McKinley Hospital, Trenton.

3:50 p. m.

The Effects of Isonicotinic Acid Hydrazide and Its Isopropyl Derivative Upon Pulmonary Tuberculosis
Jacob Segal, M.D., Medical Director, Deborah Sanatorium, Browns Mills.

SECTION ON RADIOLOGY

Benjamin Copleman, M.D., Chairman, Perth Amboy
Nicholas G. Demy, M.D., Secretary, Plainfield

Viking Room, Thirteenth Floor

2:00 p. m.

The Radiologic Aspects of the Chest in Industry
Eugene P. Pendergrass, M.D., Professor of Radiology, University of Pennsylvania School of Medicine, Philadelphia, Pa.
Discussor: Alan J. Stolow, M.D., Somerville.

3:15 p. m.

The Role of the Radiologist in the Management of Intestinal Obstruction
Vincent Whelan, M.D., Radiologist, Riverview Hospital, Red Bank.
Discussor: Christopher A. Beling, M.D., Newark.

4:00 p. m

Diagnosis of Certain Congenital Malformations of the Heart by Conventional Radiographic Methods
Nicholas G Demy, M.D., Roentgenologist, Muhlenberg Hospital, Plainfield.
Discussor: Francis P. Carrigan, M.D., Newark.

SECTION ON DERMATOLOGY

Bart M. James, M.D., Chairman, Newark
Emanuel M. Satulsky, M.D., Secretary, Elizabeth

West Room, Thirteenth Floor

2:00 p. m.

Skin Eruptions of Pregnancy
Emanuel M. Satulsky, M.D., Associate Attending Dermatologist, Elizabeth General Hospital, Elizabeth.
Discussor: Edward E. Shapiro, M.D., Bayonne.

2:30 p. m.

Dermatologic Manifestations of Systemic Diseases
Frank C. Combes, M.D., Professor of Dermatology and Syphilology, New York University, Post-Graduate Medical School, New York City.

3:00 p. m.

Sarcoidosis
Jacob Bleiberg, M.D., Associate Attending Dermatologist, St. Michael's Hospital, Newark.
Discussor: Morris H. Saffron, M.D., Passaic.

HOUSE OF DELEGATES

Presiding Officer, DR. HARROLD A. MURRAY, President, Newark
Secretary, DR. MARCUS H. GREIFINGER, Newark
Sergeants-at-Arms: DR. BENJAMIN F. LEE, Camden
DR. FRANK S. FORTE, Newark

The Committee on Credentials will meet at the Registration Desk each morning of the meeting.

Viking Room, Thirteenth Floor

First Session: 2:30 p.m., Sunday, May 17, 1953

Order of Business

1. Call to Order
2. Invocation: Rabbi Martin M. Weitz, Beth Israel Congregation, Atlantic City
3. Organization of House of Delegates
4. Minutes of 1952 Meeting
5. Introduction of Delegates from Other States
6. Annual and Supplemental Reports
7. New Business
8. Announcements
9. Open Discussion on Medical-Surgical Plan

Second Session: 12:30 p. m., Monday, May 18, 1953

Order of Business

1. Report of Nominating Committee
2. Election

Third Session: 9:30 a.m., Tuesday, May 19, 1953

Order of Business

1. Reports of Reference Committees
2. Unfinished Business
3. Installation of Incoming President
4. Adjournment

REFERENCE COMMITTEES

10:00 a. m., Monday Morning, May 18, 1953

Reference Committee "A"
Green Room, Thirteenth Floor

Reports of

The President
The Board of Trustees
The Secretary
The Judicial Council
The Executive Officer

Reference Committee "B"
Room 1333, Thirteenth Floor

Reports of

The Treasurer
The Finance and Budget Committee
The Publication Committee

Reference Committee "C"
Room 1337, Thirteenth Floor

Reports of

The Medical Service Administration
The Medical-Surgical Plan
The Medical Research Committee
The Medical School Committee

Reference Committee "D"
Room 1335, Thirteenth Floor

Reports of

The Medical Defense and Insurance Committee
The Advisory Committee to the Woman's Auxiliary
The Medical Education Committee
The New Jersey State Board of Medical Examiners

2:00 p. m., Monday Afternoon, May 18, 1953

Reference Committee "E"
Room 1333, Thirteenth Floor

Reports of

The Welfare Committee
The Subcommittees of the Welfare Committee
The Advisory Committees to the Subcommittees of the Welfare Committee

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Reference Committee on Constitution and By-Laws
Room 1335, Thirteenth Floor

Amendments to the Constitution
Amendments to the By-Laws

Reference Committee on Miscellaneous Business
Green Room, Thirteenth Floor

Reports of
The Annual Meeting Committee
The Subcommittee on Scientific Program
The Subcommittee on Scientific Exhibits
The Place and Dates for the 1954 Annual Meeting
Miscellaneous Business

Reference Committee on Resolutions and Memorials
Room 1337, Thirteenth Floor

Reports of
The Honorary Membership Committee
Nominations for Emeritus Membership
Resolutions
Memorials

Reference Committee on Credentials
Meets at Registration Desk each morning of the meeting.

SPECIAL EVENTS

Monday, May 18, 1953

1:00 p. m.

Luncheons:

Section on Heart Diseases
Room 1344, Thirteenth Floor

New Jersey Chapter, American College of Surgeons
Carolina Room, Chalfonte Hotel

4:30 p. m.

New Jersey State Council for Improvement of School Health Services
Viking Room, Thirteenth Floor

OPEN MEETING

Maintaining Eye Health for Learning: The School's Responsibility

Greetings: I. J. Wolf, M.D., Chairman.

Presiding: Mr. Mason A. Stratton, Vice-Chairman, Superintendent of Atlantic County Schools.

Keynote Speaker: Franklin M. Foote, M.D., Executive Director, National Society for the Prevention of Blindness.

Symposium: Mr. Russell Knight, Superintendent of Schools, Delaware Township.

Mrs. Paul E. Rauschenbach, Parent, Paterson.

Mrs. Hilda Frame, Principal and Teacher, Nesco School, Hammonton.

K. Virginia Maurer, M.D., School Physician, Livingston.

Robison D. Harley, M.D., Ophthalmologist, Atlantic City.

6:00 p. m.

Dinner:

New Jersey Branch, American Medical Women's Association
Rowsley Room, First Floor

Tuesday, May 19, 1953

12:30 p. m.

Luncheons:

Woman's Auxiliary
West Room, Thirteenth Floor

New Jersey Allergy Society
Rowsley Room, First Floor

6:30 p. m.

Banquet:

Vernon Room, Lounge Floor

10:00 p. m.

Social—Courtesy of The Mennen Company
Rutland Room, First Floor

Wednesday, May 20, 1953

12:00 noon

Luncheons:

Section on Chest Diseases
Mandarin Room, Thirteenth Floor

Section on Neuropsychiatry
Room 1344, Thirteenth Floor

Section on Dermatology
Room 1333, Thirteenth Floor

THE WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF NEW JERSEY

TWENTY-SIXTH ANNUAL MEETING

Sunday, May 17, 1953

6:30 p. m.—Fellowettes' Dinner (by invitation only)
Rowsley Room, First Floor

Monday, May 18, 1953

10:00 a. m.—Registration; Breakfast, Luncheon, and Dinner Tickets
Lounge Floor

1:00 p. m.—Pre-Convention Board Meeting
West Room, Thirteenth Floor

3:30 p. m. to 4:30 p. m.—Tea Honoring Atlantic County Auxiliary Members
West Room, Thirteenth Floor

Guest—Mrs. Ralph Eusden, President, Woman's Auxiliary to the American Medical Association.

All physicians' wives are cordially invited.

8:00 p. m.—General Session of the 187th Annual Meeting of The Medical Society of New Jersey

Vernon Room, Lounge Floor

The members of the Woman's Auxiliary are cordially invited to attend.

Tuesday, May 19, 1953

9:00 a. m.—Registration; Breakfast, Luncheon and Dinner Tickets
Lounge Floor

9:00 a. m.—General Session
West Room, Thirteenth Floor

Order of Business:

1. Invocation: Reverend H. E. Sheehan, D.D.
2. Pledge of Loyalty to the Woman's Auxiliary to the American Medical Association
   Mrs. Thomas H. McGlade, Immediate Past-President
3. Welcome
   Mrs. F. Rolfe Westney, President, Woman's Auxiliary to The Medical Society of Atlantic County.
4. Response
   Mrs. Frank S. Forte, President-Elect, The Woman's Auxiliary to The Medical Society of New Jersey.
5. Memorial Service for Departed Members
   Mrs. William E. Dodd
6. Convention Announcements
   Mrs. Harry Subin, Chairman
7. Reports

12:30 p. m.—Luncheon Honoring Mrs. Edward H. Dyer, President
West Room, Thirteenth Floor

Presiding: Mrs. David B. Allman

Greetings: Dr. Harrold A. Murray, President, The Medical Society of New Jersey

Guest Speaker: Mrs. Ralph Eusden, President, Woman's Auxiliary to the American Medical Association

Presentation of President's Pin:

To: Mrs. Edward H. Dyer, President

By: Mrs. Thomas H. McGlade, Immediate Past-President

2:00 p. m.—General Session (continued)
West Room, Thirteenth Floor

Order of Business:

8. Reports and Discussions
9. Report of Nominating Committee
10. Election of Officers

6:30 p. m.—Banquet Honoring President and Mrs. Harrold A. Murray
Vernon Room, Lounge Floor

10:00 p. m.—Social—Courtesy of The Mennen Company
Rutland Room, First Floor

Wednesday, May 20, 1953

9:00 a. m.—Inaugural Breakfast
West Room, Thirteenth Floor

Speaker: Dr. Henry B. Decker, President-Elect, The Medical Society of New Jersey

10:00 a. m.—Post-Convention Board Meeting
West Room, Thirteenth Floor
Mrs. Frank S. Forte presiding.

There will be an instruction session for new State Officers, Chairmen and County Presidents immediately following the Post-Convention Board Meeting.

EDUCATIONAL EXHIBITS

Gallery, Lounge Floor

Booth 1—Prevention of Chronic Illness Through Visual Education—Committee on Chronic Illness of The Medical Society of New Jersey in cooperation with the Essex County Service for the Chronically Ill.—This exhibit will show three visual aids for education on prevention of chronic illness. One portion will be the new exhibit used in the schools by the Essex County Heart Association in demonstrating to school children the work your heart can do. The second portion will be a question and answer board (on a school slate) that deals with alcoholism—a chronic disease. The third portion will be a doll house which demonstrates what Homemaker Service can do in the home.

Booth 2—Help Yourself to Health — Woman's Auxiliary to The Medical Society of New Jersey.—Outlines community health programs available to interested lay groups in New Jersey.

Booth 3—Medical-Surgical Plan of New Jersey.—Medical-Surgical Plan of New Jersey is a cooperative, community enterprise, representing a partnership between 5,000 Participating Physicians and more than 1,000,000 citizens of New Jersey. It is dedicated to the proposition that doctors and their patients can solve their mutual economic problems through voluntary effort.

This exhibit is offered for the information of the Participating Physicians, whose cooperation makes it possible for Medical-Surgical Plan to render an increasing service to the profession and the public.

Booth 4—Medicine's Ten Challenges — Committee on Public Relations of The Medical Society of New Jersey.—1. We must insure an adequate supply of physicians to treat people who are sick. 2. We must help make more hospital beds available where needed. 3. We must meet the needs of the chronically ill. 4. We must help develop local health services. 5. We must step up medical research. 6. We must educate our citizens and legislators concerning the need for a medical-dental school. 7. We must provide adequate diagnostic, rehabilitation, and other medical services for all income groups. 8. We must furnish "round-the-clock" service to the chronically ill. 9. We must adjust our fees to meet the patient's needs. 10. We must promote better public relations.

Booth 5—Joint Committee on Professional Relations—The Medical Society of New Jersey and the New Jersey Pharmaceutical Association.

Booth 6—Four Point Basic Program for Improvement of School Health Services—New Jersey State Council for Improvement of School Health Services.—This exhibit illustrates the principles of the program developed by The Medical Society of New Jersey and the State Department of Education.

The four basic points which the program recommends are: 1. Stripped to the waist examination. 2. Minimum of four spaced examinations throughout the school life of the child. 3. An organized program of mental hygiene for each school system. 4. Annual x-rays for all school personnel.

Peverel Lounge, Lounge Floor

Booth 7—Heart-Saver-Kitchen—The New Jersey Heart Association, Inc.—Full scale kitchen and laundry to demonstrate work simplification as an aid to the cardiac housewife. The kitchen consists of a sink, dish washer, range, refrigerator, cabinets, movable table, heart saver chair on wheels, turntable corner shelves and utensils arranged to conserve motion by the user. The laundry consists of automatic washer, drier, water heater, ironer and other appliances. The kitchen was designed according to the carefully worked out plans of a voluntary subcommittee of the New York Heart Association's Committee on Cardiovascular Diseases in Industry. The subcommittee was headed by Dr. Lillian Gilbreth, consulting engineer, and included authorities in industrial and management engineering, home economics, family relations, psychiatry, physical therapy, physiology, rehabilitation and architecture. This exhibit was built by the Public Service Electric and Gas Company of New Jersey from plans suggested in the October 1951 issue of *Woman's Home Companion.* Attendants supplied by the Jersey Gas Association will man the exhibit and give demonstrations of the many motion saving features.

SCIENTIFIC EXHIBITS

Solarium

Booth 1—Surgical Correction of Acquired Heart Disease—Houck E. Bolton, M.D., Charles P. Bailey, M.D., William B. Likoff, M.D., William L. Jamison. Hahnemann Medical College and Hospital, Philadelphia, Pa.

The exhibit will show history, surgical procedure and clinical results of groups of cases with mitral stenosis, mitral regurgitation, aortic stenosis, aortic regurgitation, tricuspid stenosis and coronary artery disease.

Booth 2—Mitral Commissurotomy — Evaluation and Results—Robert P. Glover, M.D., O. Henry Hanton, M.D., Thomas J. E. O'Neill, M. D., Louis A. Soloff, M.D., Thoracic Surgical Service of Episcopal, Hahnemann and Lankenau Hospitals, Philadelphia, Pa.

The operation of commissurotomy for mitral stenosis has been employed by the authors and their associates for the past four years. The indications for its use, after a period of trial and error, can now be clearly defined. Details of its exacting technic in an experience of over 400 cases have crystallized and are briefly presented. The immediate pre- and post-operative management of patients submitting themselves for surgical consideration is outlined. Physiologic data as obtained by cardiac catheterization before and after surgery at varying intervals is available. The present status of each case in our personal series (350 cases) is accurately tabulated as are the causes of our mortality (5 per cent).

Booth 3—Depo-Heparin® in Long Term Therapy of Myocardial Infarction — Irvin Sussman, M.D., Bridgeton, Millville and Elmer Hospitals.

Detailed presentation of a patient treated with Depo-Heparin® exclusively for three separate episodes of myocardial infarction. Charts outlining advantages and disadvantages of this mode of anticoagulant therapy. Graphs of clotting times, indicating response. Total number of cases so treated will number between 30 and 40. Results of total study will be summarized.

Booth 4—Treatment of Intractable Angina Pectoris with Fractional Doses of Radioactive Iodine—J. B. Wolffe, M.D., E. I. Siegal, M.D., G. W. McGinnis, M.D., A. D. Dale, M.D., R. Smith, M.D., J. A. Bierly, Valley Forge Heart Institute, Fairview Village, Pa., and the Wolffe Clinic, Philadelphia, Pa.

Classification of arteriopathies; exhibition of Geiger counter and other apparatus necessary in isotope therapy; charts summarizing results of treated cases; x-ray plates showing different types of arteriopathies, photographs of people before and after treatment.

Booth 5—Coronary Occlusion Without Anterior Chest Pain—C. E. Kiessling, M.D., A. M. Lyle, F.S.A., H. B. Kirkland, M.D., Prudential Insurance Company, Newark.

Of the 162 coronary occlusions that we have seen among the Prudential staff, 28 had atypical symptoms during the acute episode. The 11 cases presented in the exhibit, constituting 9 per cent of the total number, were particularly confusing because they had no anterior chest pain, the pain being in the neck, back, shoulder or extremities. In each case the final diagnosis was based upon clinical and laboratory findings, including the electrocardiogram.

Booth 6—The Superior Vena Cava Compression Syndrome—Pathologic Physiology and Therapentic Management—Bernard Roswit, M.D., Gustave Kaplan, M.D., Harold G. Jacobson, M.D., Joseph Gennis, M.D., Radiological Service, Veterans Administration Hospital, New York, N. Y.

In this exhibit will be presented the experience of the authors with a large series of patients with the superior vena cava compression syndrome, dealing principally with the problems of etiology, radiographic diagnosis and localization, dynamic changes in pathologic physiology, and therapeutic management. Patients presenting this syndrome are soon in desperate need of relief from strangulation and mediastinal compression. Of particular interest is our experience with a group of such critically ill patients with neoplastic disease, in whom a gratifying palliative response was achieved with roentgen therapy and nitrogen mustard, or both.

Booth 7—The Effectiveness of a Crystalline Whole-Leaf Digitalis Preparation in the Maintenance of Digitalization as Compared with Whole-Leaf Digitalis — Arthur Bernstein, M.D., Henry Kuperman, M.D., F. Weiss, M.D., E. Klosk, M.D., F. Simon, M.D., Newark Beth Israel Hospital, Newark.

1. Evaluation of digitalizing effect.
2. Glycoside content of Digitalis Lanata, Digilanid,® and Digitalis Purpurea.
3. Action of Digilanid®—Drawing of heart with site of action of Digilanid ® shown.
4. Disappearance of Digilanid ® side effects.
5. Summary of crystalline whole-leaf digitalization.

Booth 8—Hepatic Abnormalities in Congestive Heart Failure—Thomas J. White, M.D., Carroll M. Leevy, M.D., Anthony M. Brusca, M.D., Angelo M. Gnassi, M.D., Felix Traugott, Jersey City Medical Center, Jersey City.

This exhibit is based on a study of the clinical, biochemical and histologic changes of the liver in congestive heart failure, and shows: 1. Incidence of hepatomegaly, jaundice, signs of portal hyper-

tension, biochemical dysfunction and histologic alterations of the liver in 73 patients with congestive heart failure. 2. Correlation of hepatic abnormalities with type of heart disease, duration of heart failure, degree of heart failure, previous diet, and history of alcoholism. 3. Relationship of observed changes to refractoriness to cardiac therapy. 4. Prognosis in patients with heart failure and hepatic dysfunction, together with suggestions for modification of cardiac therapy in these patients.

Booth 9—Pneumoroentgenography — J. Sydney Ritter, M.D., William H. Shehadi, M.D., Alfred A. Johnson, M.D., New York Polyclinic Medical School and Hospital, McCarthy Urological Clinic, New York, N. Y.

This exhibit demonstrates the use of gases for injection into the spaces of the body so as to delineate the uro-genital tract. Pneumopyelograms, cystograms, ureteropyelograms and perirenal insufflation according to Carelli and Rivas technics will be used.

Booth 10—A Simplified Uroflowmeter—William M. Drake, Jr., M.D., Cooper Hospital, Camden, Jefferson Hospital, Philadelphia, Pa.

This exhibit consists of a new piece of apparatus which demonstrates the ability of a patient to urinate.

Booth 11 — Glaucoma — William A. Sturman, M.D., Richard E. Lang, M.D., George M. Fissell, M.D., Newark Eye and Ear Infirmary, Newark.

1. Diagrammatic sketches of pathologic anatomy in glaucoma. (posters). 2. Posters highlighting differential diagnosis and treatment. 3. Graphs indicating incidence in total population and relationship to other factors causing blindness.

Booth 12—Female Sterility — Rita S. Finkler, M.D., and Sylvia F. Becker, M.D., Newark Beth Israel Hospital, Newark.

This exhibit will represent an analysis of 400 infertile couples seen in the past 5 years. It will consist of eight 30 x 50 inch charts discussing in detail etiology, diagnostic procedures and therapy.

Booth 13—Porphyria — Detection and Management—Louis F. Albright, M.D., Frederick C. Steller, M.D., Medical Department, Fitkin Memorial Hospital, Neptune.

Large posters detailing the following—1. Classification of porphyria, main types and sub-types with a few identifying characteristics. 2. Tabulation of signs and symptoms with emphasis on conspicuous or unique features. 3. Tabulation of laboratory procedures aiding in identification of porphyria. 4. Tabulation of suggested therapeutic measures including brief remarks concerning our personal experiences.

Demonstration of the simple laboratory procedures which we have used for the detection and identification of porphyria. Enlargements of actual kodachromes taken in the laboratory to demonstrate color reactions. A large dark box in which the characteristic fluorescence under Wood light can be demonstrated.

Booth 14—Topical Estrogens: Clinical Effects and Side Actions—Irving Shapiro, M.D., Newark.

Charts and photographs illustrating the use of topical estrogens in acne vulgaris, seborrhea oleosa, male-pattern baldness, keratoderma climacterium, menopausal pruritus vulvae and erythematous dermatoses.

Garden Room

Booth 15—Pneumoconiosis—Henry A. Brodkin, M. D., Medical Director, N. J. State Department of Labor and Industry; Kenneth W. Smith, M.D., Medical Director, Johns Manville Co., Newark.

Industrial diseases of lungs illustrated by x-rays and photographs of specimens and cut sections of lung.

Booth 16—Tumors of the Hands and Feet — Robert J. Booher, M.D., and George T. Pack, M.D., Mixed Tumor Service, Memorial Cancer Center, New York, N. Y.

This is an exhibit of the benign and malignant tumors of the hands and feet which presents a photographic review of typical case histories as well as unusual lesions in both black and white photographs and colored slides and photographs designed to give the principles of treatment as well as histologic detail. This is a breakdown of the experience of the Mixed Tumor Service at Memorial Cancer Center over a 13 year period (1935-1947 inclusive) compared with the preceding 20 year period with a 5 year follow-up. This exhibit deals with some tumors of the skin and its appendages and with the pigment-bearing mechanism of the soft somatic parts.

Booth 17—Preferred Management of Breast Lesions—Thomas A. Shallow, M.D., Sherman A. Eger, M.D., Frederick B. Wagner, Jr., M.D., Jefferson Medical College and Hospital, Philadelphia, Pa.

This exhibit will illustrate by means of charts, roentgenograms, photographs, photomicrographs, and drawings the danger of delay in establishing the exact nature of localized breast tumors and the advantages of early diagnosis, particularly in cases of malignancy. Also will be featured an improved technic of excisional biopsy which has proved to be reliable in unmasking hidden breast cancer.

Booth 18—Cancer of Mouth, Pharynx and Upper Esophagus — Edgar P. Cardwell, M.D., Samuel A. Goldberg, M.D., Presbyterian Hospital, Newark.

The purpose of this exhibit is to indicate methods by which morbidity following major surgery for cancer may be reduced by plastic procedures planned

in advance, and the free use of skin grafts. The exhibit will consist of transparencies, charts and specimens. The transparencies will be photographs of specimens and microscopic sections. The charts will be similar in nature to those generally exhibited, explaining the visual exhibit.

Booth 19—Aids in Control of Cancer in Childhood—Harold W. Dargeon, M.D., Carl H. Smith, M.D., C. Everett Koop, M.D., David H. Clement, M.D., Children's Tumor Registry, New York, N. Y.

The exhibit illustrates the following material in the Children's Tumor Registry: 1. The problems in diagnosis in one hundred cases from Children's Hospital, Philadelphia; 2. Diagnostic aids from bone marrow studies in the diagnosis of neoplastic diseases; 3. An analysis of 583 cases from the pediatric service of Memorial Cancer Center from the standpoint of diagnosis, age, sex, delay in diagnosis and delay in therapy.

Booth 20—Technics in Early Diagnosis of Cancer—Advisory Committee on Cancer Control, The Medical Society of New Jersey, Asher Yaguda, M.D., Thomas K. Rathmell, M.D. N. J. State Department of Health, E. L. Shaffer, Ph.D.

This exhibit has been arranged by the Advisory Committee on Cancer Control with the cooperation of the Cancer Division of the State Department of Health. It is the aim of this exhibit to illustrate graphically laboratory methods which are useful in the early diagnosis of cancer. Technics of taking material for cytologic study and biopsies will be illustrated. The results which may be obtained by such studies will be discussed and illustrated by actual microphotographs of actual cases. Instruments used in the taking of biopsies from various sites will be demonstrated.

Booth 21—PVP—Plasma Expander—William G. Bernhard, M.D., Harold Grubin, M.D., Abdol H. Islami, M.D., Houshang Hakin, M.D., Robert Brinning, M.D., Rita M. Knauf, M. T., Hospital of St. Barnabas and for Women and Children, Newark, and Schenley Laboratories, Inc., New York, N. Y.

Charts, illustrations, pictures of the use of PVP (Polyvinylpyrrhidone), a satisfactory plasma expander in the emergency treatment of shock and its sequelae. Charts will illustrate the background, chemistry and pharmacology of PVP as well as the evaluation of substances used as plasma expanders. Other charts will portray a summary of the laboratory tests and follow-up tests in over 100 cases followed for over a year. There will be several illustrations of the typical response of shock to PVP therapy.

Booth 22—Critical Analysis of Bone Flap Cleft Palate Operation—Lyndon A. Peer, M.D., John C. Walker, Jr., M.D., Michael B. Collito, D.D.S., Hospital of St. Barnabas, Newark.

Results shown graphically after evaluation of 188 patients operated on for cleft palate. This will show the late results in the following departments: psychology, speech, cephalometric, audiometric, mastication and surgical.

Booth 23—Laboratories of New Jersey State Department of Health—Elmer L. Shaffer, Ph.D., N. J. State Department of Health, Division of Laboratories, Trenton.

Display of requests for laboratory examinations received with poorly written or defaced names and addresses of physicians and patients. Purpose: to indicate why physicians do not always receive reports on specimens submitted.

Booth 24—Surgical Management of Chronic Ulcerative Colitis—H. E. Bacon, M.D., H. D. Trimpi, M.D., P. Recio, M.D., E. Lowell, M.D., J. McElwain, M.D., Temple University Hospital, Philadelphia, Pa.

The indications for surgery in chronic ulcerative colitis are presented with descriptive colored transparencies. Radiographic studies further demonstrate these; pre-operative suggestions are listed. Operative technics for combined ileostomy and second stage abdominoperineal excision of rectum are depicted by 18 colored transparencies. Post-operative suggestions and care of ileostomy are presented. Photographs of operative specimens, patients, and statistical review of operative mortality and rehabilitation are included. Anatomic studies of blood supply of the colon and its ligamentous attachments are depicted.

Booth 25—Peo-Jejunitis—A. I. Friedman, M.D., Richard H. Marshak, M.D., Burrill B. Crohn, M.D., Mt. Sinai Hospital, New York, N. Y.

Progressive roentgen studies in the development of jejuno-ileitis and classification into a) stenosing; b) non-stenosing varieties. Differential diagnosis with other diseases of the small bowel.

Booth 26—Acute Massive Peptic Ulcer Hemorrhage—W. Emory Burnett, M.D., G. P. Rosemond, M.D., V. W. Lauby, M.D., H. T. Caswell, M.D., Temple University School of Medicine and Hospital, Philadelphia, Pa.

The problem of acute massive ulcer hemorrhage is one of common concern to both internists and surgeons. It has been particularly difficult to choose which patient should have surgical treatment and which one should be continued under medical management. In this exhibit the vital role of penetrating ulcer in intractable hemorrhage requiring surgical treatment is portrayed. Clinical methods of making the diagnosis of penetrating ulcer are presented from an experience with two hundred carefully selected cases of acute massive peptic ulcer hemorrhage. The need for operating on the patient with recurrent massive hemorrhage is also brought out.

Booth 27—Personality Disorder and Epilepsy—M. P. Rosenbloom, M.D., M. Luzzi, Veterans Administration Hospital, Lyons.

This exhibit will consist of a series of charts containing significant electro-encephalographic tracings which will be correlated with concise summaries of clinical cases. The selection of the material will portray the variety of personality disturbances including states of excitement, effective disturbances, overactivity, feelings of unreality, and

other personality deviations which may or may not be associated with convulsive manifestations. The exhibit will also include other significant data such as pneumoencephalography or x-ray. The exhibit will attempt to highlight the fact that significant personality deviations of an episodic nature may be a prominent symptomatic manifestation of an occult convulsive state, and often are diagnosed improperly.

Booth 28—Esophageal Atresia — Hugh B. Lynn, M.D., Babies Hospital, Newark.

Drawings of conditions, types of atresias and fistulas. Photographs showing steps in diagnostic x-rays. Photographs of pre- and post-operative card.

Booth 29—Sigmoidoscopy; Analysis of 4,500 Consecutive Cases—Paul L. Shallenberger, M.D., Peter Fisher, M.D., Guthrie Clinic, Robert Packer Hospital, Sayre, Pa.

This exhibit consists of a statistical analysis of 4,500 sigmoidoscopic examinations. The factual information is presented by means of three dimensional charts, paintings and colored photographs. Selected case histories are illustrated and peepshow tests the acumen of the audience This type of examination should not be confined to the specialist, but should be widely used by all branches of medicine in an effort to improve early detection of cancer, by the recognition and removal of early lesions and polyps.

Booth 30—Surgical Emergencies of Infancy and Childhood—Ernest E. Arnheim, M.D., Mount Sinai and Beth Israel Hospitals, New York and Beth-El Hospital, Brooklyn, N. Y.

This exhibit presents experiences in the management of 300 cases of 19 types of surgical emergencies of the newborn period, infancy and childhood in 3 general hospitals. The conditions are classified according to the age groups of the children. The pathologic and clinical features, diagnosis, treatment and results are reviewed and illustrated by the use of photographs, drawings and tables.

Booth 31—Prantal:® Results in Treatment of Peptic Ulcers—Theodore S. Heineken, M.D., Mountainside Hospital, Montclair.

Result of treatment in over 100 cases—with follow-up of more than a year in 52.

Booth 32—Current Status of Magnamycin: Laboratory and Clinical—H. Seneca, M.D., W. A. Wright, M.D., M. Carlozzi, M.D., F. Tanner, M.D., L. L. Leveridge, M.D., College of Physicians and Surgeons, Columbia University, New York, N. Y.

Laboratory and clinical data on magnamycin. This is a wide spectrum antibiotic which has a specific effect on gram-positive cocci, particularly antibiotic resistant staphylococci and streptococci. It is also effective against protozoa, large viruses and rickettsia. About 250 patients have been treated thus far with magnamycin with very successful results.

TECHNICAL EXHIBITS

Lounge Floor

Booth A—Medco Products Co., Tulsa, Okla.

Booth B—Encyclopaedia Britannica, Inc., Philadelphia, Pa.

Booth C—Lissco Medical Company, Inc., Newark, N. J.—Besides representing all the major manufacturers, we strive to promote new items in the medical field. We have some new things which we are going to show this year—one in particular is the Vibra Bath® made by Birtcher of California. Lissco also has started the Medical Book Store of New Jersey which makes it easier to order medical books of any and all publishers at one source.

Booth D—A. H. Robins Company, Inc., Richmond, Va.—The A. H. Robins Company medical service representatives in attendance at this exhibit welcome the opportunity to discuss the merits of three new Robins products: Mephate® capsules, an improved mephenesin preparation; Donnatal Plus® tablets, providing the Donnatal® spasmolytic-sedative formula with the addition of B Complex; and Donnalate® tablets, combining Donnatal® and Robalate® for peptic ulcer therapy.

Booth 1—L. & B. Reiner, Inc., New York, N. Y.—L. & B. Reiner, Inc., are exhibiting the new revolutionary Jones Air Basal,® a metabolism testing device using no oxygen, with multiple connections for various types of patients, no calculations for the basal metabolic rate, and no electric connections. Also shown is the Teca low volt generator equipment featuring the new chronaxie meter, the H. G. Fisher & Company short wave diathermy equipment, and the Whitehall whirlpool baths.

Booth 2 — Dome Chemical Corporation, New York, N. Y.—We are featuring our latest product, Acid Mantle Creme® (pH 4.2) for restoring the normal acid content of the skin and thus avoiding contact dermatitis, particularly in those patients with a change in the pH of their skin and who show a hypersensitivity to alkalies and soaps. We are also showing the high potency synthetic vitamin A family of skin cremes both alone and with estrone, U.S.P. and Neomycin-Vi-Dom-A Creme,® High Potency Vi-Dom-A Creme,® Es-A Creme® and Es-A-Mycin Creme.® High potency vitamin has now definitely been proved to inhibit scaliness of the skin when applied topically. For therapeutic oral vitamin A therapy, Vi-Dom-A Pillettes® are shown in either 25,000 or 50,000 U.S.P. units strength.

These are the small pillettes that contain synthetic vitamin A, therefore have no fishy taste or odor and cause no gastric upsets, also contain no gagging gelatin. Thus they can be chewed like candy.

In charge of exhibit—Mr. I. B. Wershaw.

Booth 3—Wyeth Incorporated, Philadelphia, Pa.—Wyeth representatives will be on hand to supply information and literature on Wyeth products. Special reference will be made to Phenergan,® which will be displayed in various dosage forms and combinations, including the new Phenergan ® Expectorant Troche with codeine. Thiomerin ® is the highly non-toxic mercurial diuretic that produces an even and persistent fluid loss.

Booth 4—White Laboratories, Inc., Kenilworth, N. J.—Mol-Iron ®-ferrous sulfate in a therapeutically potentiated form—has been described by competent investigators as the most effective iron therapy known. Rapid hemoglobin increases plus a markedly low incidence of side-effects are two of the outstanding characteristics of the product. Available in drops, liquid and tablets, Mol-Iron ® provides iron therapy for patients of all age groups. Complete clinical data available at Booth No. 4.

Booth 5—Schering Corporation, Bloomfield, N. J.—Members of The Medical Society of New Jersey and their guests are cordially invited to visit the Schering exhibit where new therapeutic developments will be featured.

Schering representatives will be present to welcome you and discuss with you these products of our manufacture.

Booth 6—Gerber Products Company, Fremont, Mich.—Gerber's Concentrated Meat Base Formula is new. It is prepared to replace milk in the allergic infant's diet. It will help assure a well-fed and happy baby.

Your Gerber detailman looks forward to showing you this important infant food. He also invites you to examine their complete line of baby foods. Up-to-date baby-care booklets are available for your office . . . Complimentary of course.

Booth 7—Faulhaber and Heard, Inc., Newark, N. J.—Full particulars can be obtained on the revised regulations and method of rating professional liability protection, effective September 1, 1952, upon inquiry at the booth of our official broker, Faulhaber & Heard, Inc.

Individual protection is also available for professional employees, such as registered or graduate nurses, x-ray or laboratory technicians and physiotherapists.

Booth 8—E. & W. Blanksteen, Jersey City, N. J.—Participation in the State Society's plan of accident and health insurance underwritten by the National Casualty Company of Detroit, through the State Society's brokers, E. & W. Blanksteen of Jersey City, New Jersey, has again reached an all time high. Approximately 75 per cent of the eligible members of the State Society are insured under this plan.

Booth 9—Hanovia Chemical and Manufacturing Co., Newark, N. J.—Stop and see the new black light display for diagnostic work, the new short wave diathermy with simplified operating features, self-lighting ultraviolet professional lamps for orificial and body irradiation, sollux infrared lamp and germicidal lamp for office and examining room.

Booth 10—Philip Morris and Co., Ltd., Inc., New York, N. Y.—Philip Morris and Company will show the results of research on the irritant effects of cigarette smoke. These results show conclusively that Philip Morris are less irritating than other cigarettes. An interesting demonstration will be made on smokers at the exhibit which will show the difference in cigarettes.

Booth 11—J. B. Lippincott Company, Philadelphia, Pa.—J. B. Lippincott Company presents, for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing.

Booth 12—Day-Baldwin, Inc., Newark, N. J.—Exhibit will include a variety of preparations that have been advertised in THE JOURNAL of The Medical Society of New Jersey. Among them will be the following: Salpabate-C ® tablets for relief in rheumatism and arthritis, Manrucen ® tablets for hypertension, Lipotab ® tablets for lipotrophic therapy and Mycoderm ® preparations for treatment and prevention of fungus infections. A new preparation, Citeme,® for effective relief in nausea and vomiting will be introduced at this time. Samples and literature will be available.

Booth 13—Pet Milk Sales Corporation, St. Louis, Mo.—Specially trained representatives will be in attendance to discuss the use of Pet Milk in infant feeding, and to present many services that are time-savers for busy physicians. Miniature Pet Milk cans will be given to visitors at the exhibit.

Booth 14—Chas. Pfizer & Co., Inc., Brooklyn, N. Y.—Terramycin,® newest of the broad-spectrum antibiotics, forms a dramatic central feature of the display of Chas. Pfizer & Co., Inc., Brooklyn, N. Y. The newest dosage forms of Terramycin ® are exhibited and indications for use are described.

Booth 15—Holland-Rantos Company, Inc., New York, N. Y.—Jelly with diaphragm—or jelly alone?—is a timely question which physicians interested in medical contraception are invited to talk over with Holland-Rantos representatives at the convention.

Koromex ® diaphragms, Jelly and Cream—separately and in sets—will be displayed for your inspection. For patients' safety and confidence, the Koromex ® diaphragm and Koromex ® Jelly or Cream mean consistently effective protection.

Trichomonicidal, fungicidal, bacteriocidal Nylmerate Jelly ® and Nylmerate Solution Concentrate ® will also be shown.

Booth 16—The C. V. Mosby Company, St. Louis, Mo.

Booth 17—Winthrop-Stearns, Inc., New York, N. Y.—Winthrop-Stearns, Inc. invite you to visit Booth No. 17, where the following products will be featured—Apolamine,® for more efficient control of nausea and vomiting due to pregnancy, radiation sickness, and other causes; Telepaque,® the new, highly effective and well tolerated oral cholecystopaque medium. Gives denser, clear cut pictures of the gallbladder and, in a substantial number of cases, also permits visualization of the biliary ducts; Levophed,® the true vasoconstrictor hormone of the adrenal medulla, for the maintenance of blood pressure in shock and other acute hypotensive states.

Booth 18—Sharp & Dohme, Philadelphia, Pa.—Research data relative to oral penicillin therapy is featured at the Sharp & Dohme technical display. The exhibit endeavors to justify reliance on oral penicillin for the therapy of the majority of penicillin treatable infections, excluding fulminating diseases requiring hospitalization. A resumé of pharmacological attributes of certan nasal decongestants completes the exhibit. Expertly trained personnel will be present to discuss these observations.

Booth 19—The Borden Company, New York, N. Y.—Borden representatives will be more than pleased to discuss with you a new powdered infant food. Bremil ® is a completely new and different modified milk in which nutritionally essential elements of cow's milk have been adjusted to supply the nutritional requirements of infants deprived of human milk. Clinical, x-ray, and laboratory evidence with a large group of infants fed exclusively on Bremil ® proved conclusively its efficiency as an infant food. Bremil ® is a new phase in infant feeding. Likewise exhibited will be our long-established products for infant feeding: Mull-Soy,® Dryco,® Biolac,® special skimmed milk, general purpose Klim,® and beta lactose.

Booth 20—G. D. Searle & Co., Chicago, Ill.—You are cordially invited to visit the Searle Booth where our representatives will be happy to answer any questions regarding Searle products of research. Featured will be Vallestril,® the new synthetic estrogen for menopausal symptoms; Pro-Banthine,® the true anticholinergic drug for the treatment of peptic ulcers; and Dramamine,® for the prevention and active treatment of motion sickness.

Booth 21—General Electric Company, X-Ray Department, Newark, N. J.—The new Model "F" inductotherm and the DWB direct writing electrocardiograph will be on display at the General Electric Company booth.

The present Model "F" is a direct descendant of the first inductotherm built by General Electric more than 20 years ago and is the result of a never-ending program of research, development and refinement. Some of the interesting features are the "200-watt plus", the built-in surgical facilities and the availability of various applicators such as the contour, cable, and air-spaced electrodes. The control panel offers the utmost in simplicity and ease of operation.

The DWB direct writing electrocardiograph incorporates many new features, such as the pull-out paper drive, wide stylus, lead transfer switch and separate rotary type chest lead selector.

Booth 22—The Upjohn Company, Kalamazoo, Mich.—The importance of cortisone is expanding as clinicians discover new applications. The Upjohn Company is justly proud of its part in the development of cortisone and in its discovery of new production methods. It is our aim to make cortisone available to ever increasing inquiries and discussion.

Booth 23 — Walker-Gordon Milk Co., Plainsboro, N. J.—The Walker-Gordon Laboratory Company's certified milk farm in Plainsboro is the world's largest farm producing certified milk. It includes over 2400 acres of farm land and 2690 cows, bulls and growing heifers.

The farm was started in 1898 and has been producing a special high quality milk since that time. It is the only certified milk farm in the world with daily medical and veterinary supervision and a complete technical laboratory on the farm providing constant medical, laboratory and veterinary supervision 24 hours each day. It is the home of the famous Rotolactor, the purpose of which is to make possible the production of a cleaner milk.

Walker-Gordon produces certified raw milk, certified pasteurized milk, homogenized vitamin D and acidophilus milk. It is distributed in the metropolitan areas of New York and Philadelphia and in the state of New Jersey by many leading milk dealers.

Booth 24—The Coca-Cola Company, Atlanta, Ga.—Ice cold Coca-Cola served through the courtesy and cooperation of the Coca-Cola Bottling Company, Atlantic City and the Coca-Cola Company.

Booth 25—The Wm. S. Merrell Company, Cincinnati, Ohio—For prompt, effective and comfortable relaxation of gastrointestinal smooth muscle spasm, Merrell presents Bentyl Hydrochloride.® Bentyl ® is a high milligram potency non-narcotic antispasmodic with two-fold musculotropic and neurotropic action. Bentyl ® is therapeutically effective in functional gastrointestinal disorders without atropine-like side actions. Bentyl ® is particularly suited for prolonged administration without habituation or increased tolerance.

Booth 26—Parke, Davis & Company, Detroit, Mich.—A cordial welcome awaits you at the Parke-Davis booth. Members of our medical service staff will be on hand to greet you and discuss any of our products in which you may be particularly interested.

Booth 27—Desitin Chemical Company, Providence, R. I.—Desitin ® ointment: the pioneer in external cod liver oil therapy. Indications: diaper

rash, slow healing wounds, burns of all degrees, lacerations, hemorrhoids and fissures.

Desitin ® powder: a unique, dainty medicinal powder saturated with cod liver oil.

Desitin ® hemorrhoidal suppositories with cod liver oil: coats ano-rectal area with soothing, lubricating cod liver oil, gives prompt relief of pain, allays itching.

Desitin ® lotion: the original cod liver oil lotion, soothing, protective, mildly astringent and healing, in non-specific dermatitis, pruritis, poison ivy, etc.

Booth 28—Bilhuber-Knoll Corporation, Orange, N. J.—For the latest information on Tensodin ® in coronary insufficiency; Valoctin ® in dysmenorrhea; Quadrinal ® in chronic asthma; Metrazol,® orally, to combat mental and physical retrogression in the aged patients, intravenously, in alcohol and barbiturate poisoning, visit the Bilhuber-Knoll Corp. Booth No. 28.

Your discussions on these and their other prescription chemicals, Bromural,® Dilaudid,® Theocalcin,® etc. will be welcomed.

Booth 29—Ayerst, McKenna & Harrison, Ltd., New York, N. Y.—We take great pleasure in extending a cordial invitation to all physicians attending The Medical Society of New Jersey meeting to visit booth 29 to see our exhibit which features Premarin ® and Antabuse.® Representatives will be pleased to discuss new developments in our line of prescription specialties, answer any questions you may have, or just have you visit. Here is an opportunity to become better acquainted with us.

Booth 30—E. Fougera & Co., Inc. & Division—Varick Pharmacal Co., New York, N. Y.—E. Fougera & Co., Inc. & Division—Varick Pharmacal Co. cordially invite physicians to discuss with professional service representatives new preparations of importance to their everyday practice. Descriptive literature and samples of all products will be available.

Booth 31—Picker X-Ray Corporation, White Plains, N. Y.—The Picker X-Ray Corporation invites you to visit our exhibit where the latest accessories and equipment available for x-ray work are on display. A staff of technical specialists will be pleased to assist you with any x-ray planning or technical problem.

Booth 32—E. R. Squibb & Sons, Long Island City, N. Y.—New Squibb products, and new brochures of useful interest to you on products already introduced, will be featured at Booth No. 32.

As in former years, your Squibb representative again cordially invites you to visit the Squibb booth.

Booth 33—Baby Service, Inc., Newark, N. J.—A beautiful red rose for every lady will once again be the theme of the Baby Service booth. This theme has become one of the highlights of the convention over the past four years. Created by the famous Totty Rose growers of Madison, New Jersey, these roses are a thing of beauty.

The doctor will be interested to learn of the new Hospital Service Division of Baby Service devoted exclusively to supplying hospital diaper service on a basis never before possible.

The latest in diapers, containers, deodorants, washing methods, residual antiseptics, etc., will be on display. A warm welcome will be extended to all.

Booth 34—Merck & Co., Inc., Rahway, N. J.—Merck & Co., Inc. is featuring Hydrocortone,® Cortone,® Mephyton,® Nalline ® and other medicinal preparations.

Hydrocortone ® and Cortone ® are supplied in forms convenient for use in the wide range of their clinical applications:—Hydrocortone ® in tablet form (20 mg.); as a saline suspension for intra-articular injection (25 mg. per cc.); as a topical ointment for dermatologic use (2.5 per cent); and as a dental ointment (2.5 per cent).

Cortone ® is supplied in tablet form for oral administration (5 and 25 mg.); as saline suspension for parenteral use (25 and 50 mg. per cc.); as ophthalmic ointment (1.5 per cent); and in ophthalmic suspensions (0.5 per cent and 2.5 per cent).

Mephyton ® is an antidote to anticoagulant-induced hypoprothrombinemia. It promptly reverses the prothrombin deficiency induced by coumarin-like compounds.

Nalline ® is the first dependable narcotic antagonist. It promptly reverses the respiratory depression that may be produced by morphine or its derivatives as well as meperidene and methadone.

Booth 35—C. B. Fleet Company, Inc., Lynchburg, Va.—C. B. Fleet Co., Inc. invites you to stop at Booth 35 to see the exhibit of Phospho-Soda ® (Fleet). Phospho-Soda ® (Fleet) is a solution containing in each 100 cc. sodium biphosphate 48 gm. and sodium phosphate 18 gm.

Phospho-Soda ® (Fleet), over the years has won discriminating preference by thousands of physicians—because of its controlled action . . . its freedom from undesirable side effect—and its ease of administration. There is only one Phospho-Soda ® (Fleet).

Booth 36—Beech-Nut Packing Company, New York, N. Y.—The Beech-Nut Packing Company will display its complete line of strained and junior foods as well as the four pre-cooked cereals. We are proud to feature corn cereal, an innovation in the field of infant feeding. Our nutritionists will be at the booth to answer questions pertaining to the use of these foods from both the geriatric and pediatric standpoint.

Booth 37—Lederle Laboratories, New York, N. Y.—You are cordially invited to visit our exhibit in Space No. 37, where you will find representatives who are prepared to give you the latest information on Lederle products.

Booth 38—U. S. Vitamin Corporation, New York, N.Y.—Exhibit features original, complete lipotropic therapy . . . Methischol ® . . . the combination of five proven lipotropic agents: B_{12},

choline, methionine, inositol and liver extract Therapeutically effective in the treatment of hypercholesterolemia as associated with atherosclerosis, coronary disease, obesity, diabetes and various forms of liver disease, including liver cirrhosis and toxic hepatitis.

Also, see and taste for yourself the new and different sodium-free salt substitute—Co-Salt ®—which actually tastes like salt, looks like salt and sprinkles like salt . . . a great boon to your patients on restricted sodium intake.

Booth 39—Saratoga Springs Authority, Saratoga Springs, N. Y.—The New York State-owned Saratoga Spa presents a new exhibit to emphasize naturally carbonated mineral water treatments. State colors of blue and gold predominate. Exhibit panels include color transparencies showing bath houses and recreational features. Two panels describe facilities for rehabilitation and recreation.

Booth 40—South Jersey Surgical Supply Co., Red Bank, N. J.—The South Jersey Surgical Supply Company will display this year for the first time, the new Continental Pioneer. This is the greatest x-ray advance in the past decade. It is a 100 M.A.—100 PKV general diagnostic unit with full wave rectification and rotating anode tube. Priced comparable to the old style self-rectified units.

Booth 41—Mead Johnson & Company, Evansville, Ind.—Mead Johnson & Company will feature the change in the formulation of Dextri-Maltose ® the dried carbohydrate, designed specially for use in infant formulas. In addition to Natalins,® small capsules containing vitamins and minerals, designed particularly for use in pregnancy and lactation; the Vi-Sols ® and four Pablum ® cereals will be on display.

Representatives in attendance will be glad to furnish information regarding the above products.

Booth 42—J. Beeber Co., Inc., New York, N.Y.—J. Beeber Co., Inc. of Philadelphia and New York will display a full line of quality medical equipment. Featured will be the Cardiall direct writing electrocardiograph, the finest and lowest priced unit available; The Raytheon Microtherm, the latest advance in diathermy apparatus. Also on display will be Mattern X-ray equipment, Hamilton furniture, Ritter tables and the latest innovations in physician's office needs. Representatives will be on hand to demonstrate the features of equipment on display.

Booth 43—Ciba Pharmaceutical Products, Inc., Summit, N. J.—Ciba's exhibit features two new agents for more effective management of hypertensive disorders—Regitine,® for simple and accurate diagnosis of hypertension produced by pheochromocytoma—Apresoline,® an agent of choice for gradual sustained lowering of blood pressure.

You are invited to visit the Ciba booth for literature on Apresoline ® and Regitine.®

Booth 44—Hoffmann-LaRoche, Inc., Nutley, N.J.—Even a glance at the new Roche display will be rewarding. You can see, for instance, colorful illustrations which show why Gantrisin ® is so valuable in bacterial infections; why Asterol ® is so effective in external fungus infections; and why Roniacol ® is so useful in vascular disorders. See this practical exhibit.

Booth 45—Sandoz Pharmaceuticals, New York, N. Y.—Sandoz Pharmaceuticals cordially invites you to visit our display at The Medical Society of New Jersey.

We plan to feature new information on certain established products and complete data on Fiorinal® —the newest in our family of ethical specialties in cephalalgia therapy.

Cafergot,® the first effective oral therapy for migraine and related vascular headaches—clinically proven in thousands of reported cases since 1949.

Bellergal,® valuable as an autonomic inhibitor in a variety of functional ills—the volume of favorable clinical reports is constantly increasing.

Fiorinal ® a new approach to therapy of tension headache and other head pain due to sinusitis and myalgia.

A variety of informational brochures will be available and our representatives will be happy to provide full information concerning the above and other ethical pharmaceutical products of the Sandoz organization.

Booth 46—The Mennen Company, Morristown, N. J.—The Mennen Company, baby specialists since 1880, will exhibit its famous line of Baby care products, consisting of sensational Mennen Baby Magic, famous Mennen Baby Oil, Mennen Baby Powder, Baby Soap and Baby Cream. Also being featured is that leader among foot powders, Mennen Quinsana.

Booth 47—Eli Lilly and Company, Indianapolis, Ind.—You are cordially invited to visit the Lilly exhibit located in space number 47. New antibiotics, cardiac drugs, and antihistamines are featured in the display. Lilly salesmen will welcome your questions about these and other recent therapeutic developments.

Booth 48—M & R Laboratories, Inc., Columbus, Ohio—Your Similac ® representatives are happy to take part in this meeting. They are pleased to have the opportunity to discuss with you the role of Similac ® in infant feeding. They have for you the latest Pediatric Research Conference reports. Also available are current reprints of pediatric nutritional interest.

Booth 49—W. B. Saunders Company, Philadelphia, Pa.—Among the new books at the Saunders booth will be Current Therapy 1953; Beckman's Clinical Pharmacology; Duncan's Diseases of Metabolism; Lewis' Practical Dermatology; Todd, Sanford & Wells' Clinical Diagnosis by Laboratory Methods; Sheldon, Lovell & Mathews' Clinical Allergy; Alexander's Treatment of Mental Disorder;

Gross' Surgery of Infancy and Childhood; The 1952 Collected Papers of the Mayo Clinic; and others. All our standard works will also be on display. They include such well knowns as Cecil-Loeb's Textbook of Medicine; Dorland's Medical Dictionary; Mitchell-Nelson's Textbook of Pediatrics; and the Medical and Surgical Clinics of North America.

Booth 50—Camel Cigarettes, New York, N. Y.—Camel Cigarettes will mark your initials on an attractive plastic cigarette case filled with a package of those mild, flavorful Camels. This exhibit features a display of some of the tobaccos used in blending this famous cigarette which outsells all other brands by many billions of cigarettes per year.

Booth 51—Smith, Kline and French Laboratories, Philadelphia, Pa.—We extend a cordial invitation to you to visit our booth where 'Dexedrine' Spansules® will be featured. Each capsule contains more than 100 tiny pellets with varying disintegration times. The Dexedrine (15 mg.) is released gradually, yet uniformly, over a span of 8 to 10 hours. Thus, in weight reduction, one 'Dexedrine' Spansule,® taken on arising, curbs appetite evenly and effectively throughout the day.

Booth 52—The Doho Chemical Corporation, New York, N. Y.—Doho Chemical Corporation exhibits Auralgan,® the time honored decongestant and pain reliever in otitis media, also for removal of cerumen; Rhinalgan,® the equally safe nasal decongestant for infants and the aged; new Otosmosan,® the fungicidal and bactericidal ear medication.

Mallon Chemical Corporation, a subsidiary, features Rectalgan® the liquid topical anesthesia for relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing.

Booth 53 — The Liebe'-Flarsheim Company, Cincinnati, Ohio.

Booth 54—Lanteen Medical Laboratories, Inc., Evanston, Ill.—Lanteen Medical Laboratories, Inc., extend a cordial invitation to visit their exhibit in booth 54. Our representatives will be happy to discuss the well known line of Lanteen Gynecics and other items of interest.

Booth 55—Nepera Chemical Co., Inc., Yonkers, N. Y.—The Nepera exhibit features its new product Biomydrin Nasal Solution® in a plastic atomizer package which is effective against sinusitis and allergic and infectious rhinitis. Thonzonium Bromide,® a new wetting agent with wide spectrum antibacterial and mucolytic properties, a product of Nepera research, is included among other ingredients in the formula.

Also included will be Mandelamine,® the urinary antiseptic, and Neohetramine,® a highly effective antihistamine.

Physicians are invited to visit our booth where Nepera representatives will greet them.

Index to Annual Reports

	Page
Annual Meeting	196
Cancer Control	203
Cardiovascular Diseases	204
Child Health	205
Conservation of Vision and Hearing	205
Constitution and By-Laws Amendment	194
Councilors	192
County Societies	220
Emeritus Membership Nominations	194
Executive Officer	193
Finance and Budget	195
General Practice	210
Group Practice	210
Judicial Council	192
Laboratory Medicine	211
Maternal Welfare	206
Medical Education	196
Medical Examiners, State Board of	214
Medical Practice	199
Medical Research	198
Medical Service Administration of New Jersey	215
Medical-Surgical Plan of New Jersey	217
Mental Hygiene	206
Nutrition	207
Pharmaceutical Problems	211
Physical Medicine	212
President	188
Public Health	199
Public Relations	200
Publication	195
Rehabilitation	208
Rural Health—Community Health	208
School Health	209
Scientific Exhibit	198
Scientific Program	197
Secretary	189
State Board of Medical Examiners	214
Treasurer	191
Trustees	191
Venereal Disease Control	209
Workmen's Compensation and Industrial Health	213

THE MEDICAL SOCIETY OF NEW JERSEY
ANNUAL REPORTS TO THE HOUSE OF DELEGATES

MAY 17, 18, 19 and 20, 1953

PRESIDENT

Harrold A. Murray, M.D., Newark

Many times during my administration fellow physicians would say "I'll bet you wish the 20th of May were here." I can truthfully say that I have enjoyed every minute of my term of office and regret that I did not have a longer period to complete the many programs which remain. This will be an opportunity for my successor and I know that he will devote all his talents in this direction.

It is impossible for any president to do the job alone. He needs a lot of help. This it was my privilege to receive. Every member of the Board of Trustees, the chairmen and members of the various committees, subcommittees and the entire administrative staff did all in their power to help bring about a very full and, I like to think, worthwhile administration. For this help I am deeply grateful. I hesitate to mention names, lest I forget any of these fine men and women of medicine.

I feel that the president of a medical society succeeds only in proportion to the amount of time which he expends in the performance of his duties. With honor goes responsibility. I am happy to say that our past presidents have assumed that responsibility. I know that for the next three years our society will be in good hands and will be directed by well informed and willing officers who will continue our worthy programs.

It was my opportunity to represent our society at over two hundred fifty meetings with various professional and non-medical groups in all parts of the state. I firmly believe that on the whole the members of our profession enjoy the respect and confidence of the people of New Jersey. The survey conducted by the Princeton Research Service, "New Jersey Appraises Its Health Services", attests to this statement. This survey was made early in this administration and will be a valuable contribution to our planning for health services in the future.

It is impossible to think of adequate health service without the help of all groups interested in health programs. This is why it is most important that all liaisons which we have made among professional and non-medical groups be continued and expanded. We must make other agencies realize that although our specific contribution to the health of a community is the rendering of medical care, we are vitally concerned with all the other factors which contribute to making people healthy, such as proper food, clothing, housing and recreational facilities. Our non-medical friends and associates desire our advice and we must continue active participation in the Councils for Local Health Services.

The care of the chronically ill is still one of the most important problems facing the medical profession today. We have made great strides during the past year with this problem. The Governor's Division of Chronic Illness Control of the Department of Health has had our active support, and with the establishment and expansion of local Homemaker's Services and the County Medical Society Committees for the Chronically Ill, the future for these members of our population is a lot brighter.

The demand for hospital beds still increases. Our Hospital Relationships Committee is preparing a formula for the solution of this problem. One of the most fascinating innovations has been the establishment of a Medical Research Committee. This committee has been working diligently to bring The Medical Society of New Jersey to the front in its scientific endeavors.

It was a happy privilege to have been president when the Medical-Surgical Plan of New Jersey—our answer to compulsory health insurance plans—commemorated the occasion of its one millionth subscriber. Our society celebrated the event by giving a dinner for the Plan's officers and representatives from industry, labor, the state departments and allied professions. The meteoric growth of this

Plan should be an incentive for every member of our society to consider this Plan as his own and help its success by his active good will and participation.

I like to think that our Public Relations Program was our most outstanding accomplishment. We dispensed with elaborate folders and costly dinners to the press and concentrated our efforts in making our fellow practitioners realize that the success of a good Public Relations Program depended upon each member of our society. In the Health Services Survey we learned that the suggestions made by the public for improving medical services included having doctors available at all times and the adjustment of our fees to meet the patients' needs. There were other suggestions but these were the most important ones. An attractive plaque was sent to each member to serve as a certificate of membership in our society and a reminder that we must make ourselves available at all times to treat the ill within their ability to pay for these services.

The Exhibit at the State Fair on our various unmet needs, and the Better Breakfast Week program were helpful contributions to good public relations.

The Directory, listing members of our society plus other information, was a task for our administrative secretary and her staff. It is a notable innovation and will be a great help to all agencies.

The Medical-Dental School Committee has been most active. Many resolutions have been received from various groups since the first public meeting of this committee in the Assembly Chambers last September. The chairman has been very active and has made many effective addresses throughout the state. The Woman's Auxiliary has been helpful in this program as in every project that we have embarked upon this year.

The dinner tendered the officers of the medical society and the presidents of the county medical societies by the members of the Supreme Court of New Jersey was a tribute which was new and will be the beginning of a lasting relationship with that august body. Similar meetings have been held with members of the dental and legal professions.

Our Legislative Committee has been a vigilant watch-dog for legislation affecting the health of our citizens and the preservation of the Medical Practice Act. The informal supper given by our society to honor our legislators will help promote mutual understanding. Special praise should be given the efficient chairman and the legislative officer for their untiring zeal. The conferences with the Governor and the members of the various chiropractor groups should be effective in developing legislation which will settle this problem.

A detailed report by the chairmen of the committees and subcommittees will be found in this issue. You will be amazed at their activities and accomplishments.

Finally, I wish to say a fond and grateful "Thank You" to everyone who has done so much to help make my work easy this year.

SECRETARY

Marcus H. Greifinger, M.D., Newark

The office of the Secretary has been extremely active this year. Routinely, numerous communications have been promptly answered and several questionnaires from the American Medical Association and other state societies completed and returned—the latter inquiring about New Jersey's programs and procedures. The Secretary attended the Chicago, Denver and Washington sessions of the A.M.A. House of Delegates.

Membership Directory

The House of Delegates in 1952 authorized publication of a membership directory this spring, to replace the former Official List. This was a task that had to be started from scratch since the only information on file was the names and addresses and record of dues payments. Questionnaires were mailed to all members last July with follow-up mailings in October and November. The final return of well over 90 per cent is a figure to which we point with pride. New Jersey hospitals were most cooperative and we thank them for sending their staff listings for inclusion in the directory. The regular staff could not assume the work of compilation and publication of the directory without seriously interfering with their

routine functions. It was necessary, therefore, to employ new persons. Experienced personnel were not available so the new employees were trained on the job. We feel an excellent result in the published directory has been accomplished.

1953 Membership

Each year approximately 10 per cent of the members allow their membership to lapse for a few months. Consequently, they not only have their names removed from the mailing list of the Society, but they jeopardize their insurance. We know that the counties allow sufficient time between billing and collecting the annual assessment, and that it is a laxity on the part of the individual member which places him on the delinquent list. We reiterate to the county societies the necessity of impressing upon their members the importance of keeping membership in good standing at all times.

At the close of March, 1953, the membership record was as follows:

Active members—Paid	4754	
Exempt	64	
Armed Service	96	4914
Associate members		139
New and reinstated members		149
Members deceased—(March '52-March '53)		48
Transfer—within the state		31
Resignations and transfers out of state		19
State emeritus members		90
State honorary members		6
County emeritus and honorary members		74

A.M.A. Membership

Another phase of the work in the Secretary's office is the recording of A.M.A. dues payments and the reporting of the payments to the national office in Chicago. The House of Delegates last year took action whereby the 1953 A.M.A. dues are to be billed and collected by the county societies and reported in bulk to the state society. Previously the state society had billed and collected from the individual members. The current system has lightened the work of the state office considerably in that the office no longer has to handle individual payments. In reverse, of course, there has been added work for the county societies, but to a lesser degree since the counties can bill and collect county, state and national dues in one operation. The A.M.A. reimburses the state society, quarterly, on the basis of 1 per cent of the payments. The state society will pro-rate these refunds, based on receipts from the counties, and reimburse the county societies. This 1 per cent does not cover the cost of billing and collecting A.M.A. dues. In 1952 New Jersey requested the A.M.A. to make an equitable revision of the rate of compensation for the work of dues collection — to 3½ or 4 per cent. The A.M.A. House of Delegates last June requested its board of trustees to restudy the method and amount of compensation paid to state societies for the collection of A.M.A. dues after consultation and conference with the organization of secretaries and officers of state societies.

At the Denver Session of the A.M.A. in December the Board of Trustees reported that the matter had been considered and discussed with state secretaries and that during the past year there had been no general expression of dissatisfaction with the present rate of compensation. Since this problem is under continuous study and since dissatisfaction is limited in extent, the Board recommended that at the present time no change be made in the procedure. The recommendation was adopted.

As of the end of March, 1953, New Jersey has reported to Chicago 3,788 members of the A.M.A. for 1953. It is hoped that the number of A.M.A. members from New Jersey will increase sufficiently this year to entitle us to another A.M.A. delegate. As of December 31, 1952, the 1952 A.M.A. membership was slightly over 4,500—permitting 5 delegates. Our potential membership is over 5,300.

Physicians Placement

Since last spring, when the Physicians Placement Service was first established, there has been an increasing number of requests for information about locations for practice in New Jersey. Periodically, physicians registered with us are requested to indicate if they have located or still desire to be carried on our list. Likewise, communities which have indicated a need for more physicians are reached.

The experience of our service during the past year records a total of 34 communities in need of physicians; 10 were discontinued in March after receiving notification that their needs had been met. Seventy physicians have been listed, 24 have been discontinued after notification that they had located (10 in New Jersey, 14 in other states). At the close of March, 1953, there are 24 communities on our list which need additional physicians, and 46 physicians seeking locations for practice.

Several New Jersey physicians seeking associates or someone to take over their practice for a short period have utilized the Physicians Placement Service in making contacts.

TREASURER

Jesse McCall, M.D., Newton

As the fiscal year does not close until May 31, 1953, the annual report cannot be submitted at this time. An interim report will be presented to the House of Delegates on May 17, 1953, covering the accounts to that date.

BOARD OF TRUSTEES

Reuben L. Sharp, M.D., Chairman, Camden

The report of the Board of Trustees is a matter of highlighting the Board actions of the year—all of which are reported in detail, in the pages of The Journal. This year has made heavy demands upon the time of the members of the Board. Accordingly, as Chairman, I should like to avail myself of this opportunity to record my appreciation and gratitude to all the Board members for their loyal and diligent service in the interests of the Society. I also wish to commend the dependable and orderly work of all the committees of the Society, the benefit of whose generous endeavors was made available to the Board through the efficient channels of the Welfare Committee, greatly facilitating our conduct of the Society's business.

COMMITTEE ON RESEARCH

In one of its earliest sessions the Board of Trustees approved the establishment of a special Committee on Medical Research, as a means of stimulating medical research efforts throughout the state.

STATE SOCIETY EXHIBIT

Approval was granted to the presentation of an exhibit at the New Jersey State Fair, sponsored by the state society through the medium of the Subcommittee on Public Relations.

HEALTH SERVICE SURVEY

An opinion study to appraise the health services of New Jersey was conducted with the approval of the Board and under its direction, to discover and make available valuable and factual information vital for the intelligent adoption of official policies and actions.

MEMBERSHIP PLAQUE

The Subcommittee on Public Relations was granted approval by the Board for the preparation and distribution of a membership plaque, to be bestowed upon all members in good standing in The Medical Society of New Jersey.

SUBCOMMITTEE ON LEGISLATION

A revised program for establishing and maintaining contacts at county level with state legislators, submitted by the Subcommittee on Legislation, was approved for adoption this year. Likewise, at the request of the Subcommittee on Legislation, the Board approved an informal buffet to honor state legislators.

MEDICAL-SURGICAL PLAN PROGRESS

The Board was happy to sponsor a dinner signalizing the enrollment of the one millionth subscriber under the Medical-Surgical Plan of New Jersey.

AMERICAN MEDICAL EDUCATION FOUNDATION

Acknowledging the imperative need for funds for medical education and the fact that New Jersey citizens at present are admitted only to certain medical schools, the Board of Trustees approved a grant of $25,000 to the American Medical Education Foundation to be made at the General Session of the 187th Annual Meeting.

JUDICIAL COUNCIL

D. F. FEATHERSTON, M.D., Chairman, Asbury Park

During the past year, the Judicial Council has met monthly and has handled the following number of cases:

Essex	1	Morris	1
Bergen	1	Passaic	2
Mercer	2	Union	1
Middlesex	2		

County reports submitted to the Judicial Council for its information and permanent file:

Cumberland	3	Mercer	3
Essex	2	Passaic	10
Hudson	4		

In the matter of the resolution on "fee splitting" submitted by the Mercer County Society to the House of Delegates, and referred via the Board of Trustees to the Judicial Council, we feel that the decision reached after prolonged thought and discussion disposes of the problem of fee splitting in New Jersey and establishes a firm foundation for the adjudication of any case which may arise in the future on this subject.

As chairman of the Council, I would like to thank the other members who have served with me: Doctors F. C. Weber, Newark, Joseph M. Keating, Passaic, Jacob L. Mann, Perth Amboy, and Isaac A. Patterson, Westville.

I would also like to extend the thanks of the Council for the efficient services of Mr. Richard I. Nevin and Gerald J. O'Mara, executive officer and counsel, respectively, of The Medical Society of New Jersey.

FIRST DISTRICT

Union, Warren, Morris and Essex Counties

FRANCIS C. WEBER, M.D., Councilor, Newark

During the past year nothing was presented for personal adjudication. The Judicial Council, as a whole, had several meetings at Trenton, the report of which will be presented by the chairman.

THIRD DISTRICT

Mercer, Middlesex, Somerset and Hunterdon Counties

JACOB J. MANN, M.D., Councilor,
Perth Amboy

I am pleased to submit my 1952-1953 annual report as Councilor for the Third District. I attended all the meetings that were called by Dr. Featherston and arranged that the cases submitted to the State Medical Societ were channeled to their proper county medical society committees for disposition. There were only two such cases from this District, both from Middlesex County, and these were amicably settled, thus avoiding any legal action.

FOURTH DISTRICT

Camden, Burlington, Ocean and Monmouth Counties

D. F. FEATHERSTON, M.D. Councilor,
Asbury Park

There were no complaints brought to the attention of the Councilor from the Fourth Judicial District, no investigations made, and no other business transacted.

EXECUTIVE OFFICER

Richard I. Nevin, Trenton

Medicine today is a profession whose interests either touch upon or embrace nearly all the vastly ranging concerns of man. Like Francis Bacon, the average practicing doctor must frequently feel that he can claim "all knowledge as his province." In the light of that knowledge, action is demanded of him. Thus, the challenge confronting the doctor of medicine today is to know all that he ought to know—in the spheres of science, ethics, government, economics, public welfare, and human relations—and then to do what should be done for the good of medicine and his fellow men. As a consequence, the interests and activities of organized medicine today are many and complex. Nowhere can this be more clearly perceived than from the vantage point that your executive officer enjoys as he carries on his work of assisting the officers of the Society in encouraging, organizing, coordinating, and effectualizing the efforts of the entire membership.

This has been an active year. On the national level, a change of administration seems to presage a lightening of the immediate threat of governmental control over medicine. Nevertheless, it is incumbent upon us to be warily watchful lest the pressures of economic need and social unease put free medicine again in jeopardy. More than ever, the responsibility for rendering a type of service that will be generally satisfactory to all our citizens lies heavily upon the shoulders of every practitioner.

Within our state the times and the circumstances impose upon the doctor relentless demands for understanding and dependable service. All the officers of the Society have realized these facts, and under the leadership of President Murray, all their energies and all the agencies of the Society have been ceaselessly at work in the interest of both the profession and public welfare.

The membership will be gratified to know that the Board of Trustees, the Judicial Council, the liaison committees, the Welfare Committee, the standing committees, the subcommittees, the special committees, and all the advisory committees have been unstinting of effort and cooperation in advancing and serving the interests of the Society. With its customary efficiency and dependability, the Woman's Auxiliary has been of inestimable value in furthering the Society's programs. In short, it is doubtful that any other organization can boast more unselfish and generous service to more unselfish and constructive ends.

The efforts of all the members of our staff have kept pace with the activities of the official agencies of the Society. Over and above the regular assignments associated with the conduct of the Society's business — the official correspondence, reports, and minutes; the issuing of The Journal, the *Membership News Letter*, the *Quarterly News Letter*, the regular *Health Hints*, the *Junior Health Hints*, the bulletins to legislators and county keymen, and the news releases; the membership lists, the bookkeeping, the physicians placement, and the innumerable details of convention management —this year extra projects have been initiated and successfully carried through. Among these, I should like to cite for special remark the compilation and distribution of the first official directory of our approximately 5,500 members, and the preparation of lists and mailing stickers for the delivery of the public relations plaque.

Your Executive Officer is proud of the accomplishments of The Medical Society of New Jersey in the past year, and prouder still to have been privileged to play his part in its achievements. The days upon which we now look back have been days of real challenge and of equally real attainment. The record has been one of unity of purpose and of action. I feel that it is a record in which we can all find reason for genuine satisfaction.

AMENDMENT TO THE CONSTITUTION AND BY-LAWS

In accordance with Article XII, the following proposed amendment was considered by the Reference Committee on Constitution and By-Laws at the 1952 Annual Meeting, published in THE JOURNAL, and officially sent to each component society in February 1953. It is presented herewith for final approval by the 1953 House of Delegates.

ARTICLE VI—BOARD OF TRUSTEES

The Board of Trustees shall be the executive body, and shall be composed of the Immediate Past-President, President, President-Elect, two (2) Vice-Presidents, Secretary and Treasurer (by virtue of their offices,) and eleven (11) members—at least two (2) from each judicial district (delete "who shall be elected as follows:") substitute: and who shall be elected for a term of three years, such term to commence upon expiration of the term of the then incumbent.

From and after May 21, 1953, any member may be elected a trustee for a maximum of three full terms, provided, however, that if the first two elected terms are successive, there shall be a lapse of one year between expiration of the second and commencement of the third term. The term of any trustee commencing prior to May 21, 1953, shall not be included in the limitation of three elected terms.

NOMINATIONS FOR EMERITUS MEMBERSHIP

The following nominations for election to Emeritus Membership at the 1953 Annual Meeting have been received from the various county medical societies:

Bergen County—Dr. William Fessler, Grantwood; age 72; retired because of age; member in good standing since before 1933.

Dr. Frank Freeland, San Diego, Calif.; age 77; retired because of age; member in good standing since before 1933.

Dr. Arcangelo Liva, Los Angeles, Calif.; age 66; retired from practice; member in good standing since 1913.

Dr. Charles A. Richardson, Closter; age 78; retired because of age; member in good standing since 1910.

Camden County—Dr. Ernest G. Hummel, Camden; age 76; retired because of physical disability; member in good standing since 1902.

Dr. I. Grafton Sieber, Audubon; age 76; retired because of age; member in good standing since before 1933.

Cumberland County—Dr. Charles W. Wilson, Vineland; age 86; retired because of age and infirmity; member in good standing since 1891.

Dr. Herbert H. Wilson, Bridgeton; age 73; retired because of age and infirmity; member in good standing since 1920.

Essex County—Dr. Hermann Cohn, Newark; age 82; retired because of age; member in good standing since before 1933.

Dr. Millard B. Ervin, Westfield; age 60; retired because of ill health; member in good standing since 1933.

Dr. Albert S. Harden, Sr., Newark; age 72; retired because of age; member in good standing since before 1933.

Dr. Robert Y. Hubbard, Holly Hill, Fla.; age 76; retired because of ill health; member in good standing since before 1933.

Passaic County—Dr. Burt W. Botbyl, Los Angeles, Calif.; age 63; retired because of ill health; member in good standing since 1917.

Dr. Elroy W. Smith, Miami Beach, Fla.; age 63; retired because of ill health; member in good standing since 1932.

Union County—Dr. John L. Meeker, Summit; age 85; retired because of age; member in good standing since 1924.

STANDING COMMITTEES

FINANCE AND BUDGET

David B. Allman, M.D., Chairman, Atlantic City

Any report of the Committee on Finance and Budget prepared for publication in advance of the convention must be tentative and general in character. Only after completion of the fiscal year does it become possible to speak in precise and accurate terms of the year's finances.

From our point of view this has been a sound and satisfactory year, as we expect to demonstrate when the final budget is submitted for approval at the annual meeting.

PUBLICATION

J. Lawrence Evans, Jr., M.D., Chairman, Leonia

In accordance with its mission the Publication Committee devoted the fiscal year to the activities of The Journal. The table below compares, statistically, the content of The Journal in 1951 and 1952.

	1952	1951
Editorial pages	37	27
Original article pages	284	310
Number of original articles	84	93
Book review pages	28	24
Number of book reviews	98	93
Advertising pages	554	560

In addition, The Journal devoted space to reporting state activities, county society reports, woman's auxiliary reports, and information concerning Medical-Surgical Plan and Public Health News for the Physicians.

On November 1, 1952, Dr. Henry A. David on, who had served ably as editor from 1941, resigned this post and was appointed Editorial Consultant. On the same date Dr. Rowland D. Goodman, 2nd, was appointed Acting Editor.

On July 4, 1952, Mr. Roy Hill, our publisher since 1909, died. Mr. Lester R. Hill is currently carrying on in his father's footsteps with the same efficiency.

In February 1953 a glossy coated paper was introduced which conspicuously improved the appearance of The Journal's pages and made it possible to reproduce photographs and illustra ions with more vividness and clarity.

This summer marks the conclusion of The Journal's first half century. One of the highlights of the next editorial year will be an appropriate celebration for The Journal's golden anniversary in September 1953. This will be tokened by a feature number of The Journal which will include a review of progress in New Jersey medicine since the turn of the century.

Starting with the first issue of 1953, the editor has placed compact previews at the beginning of each scientific article. This innovation has been warmly received and will be continued.

The Committee takes this opportunity of thanking Dr. Goodman for the swift efficiency with which he took over the editorial duties last fall. Thanks are also due to Dr. Davidson for his continued interest in and help to the Committee, to Mrs. Madden for serving so effectively as liaison between The Journal and the Executive Offices, and to Mrs. Armstrong whose meticulous attention to the day-by-day details of publishing and distributing The Journal is largely reponsible for the smoothness of the operations of the Editorial Office.

MEDICAL EDUCATION

Francis M. Clarke, M.D., Chairman, New Brunswick

This report of the Medical Education Committee refers to reports previously submitted in 1951 and 1952. In these reports the need for a full time executive staff and an outline of the work and the Committee were presented.

The Committee has engaged in no organized educational activities during the past year. In order to obtain a record of formally organized teaching programs other than the scientific programs of the regular county society meetings, a letter of inquiry was sent to the secretaries or chairmen of the education committees of all county societies, asking for this information. Replies were received from eleven counties; of these, six reported formally organized educational programs, namely, Atlantic, Mercer, Camden, Ocean, Cumberland and Hudson. The outline of courses presented from these six counties indicates interest in basic problems of clinical medicine, and in two counties, Camden and Hudson, the programs were presented under the auspices of the New Jersey Academy of General Practice. In Mercer County there was presented a course in basic psychiatry at the New Jersey Neuro-Psychiatric Institute and State Village at Skillman. Cumberland County reported a series of four lectures on basic clinical problems given in 1952 as a continuation of a course organized in 1951. Atlantic County reported its visiting Chief Pro Tem program conducted at the Atlantic City Hospital, and at the Shore Memorial Hospital in Somers Point, given by distinguished visiting physicians from the entire nation. This is unique and interesting, and is an illustration of the successful utilization of facilities and opportunities at hand; it is reminiscent of the central theme of Dr. Russell Conwell's celebrated lecture, "Acres of Diamonds". Programs of great value are constantly in progress in all of the hospitals in the state, and in Essex County, the seat of the Academy of Medicine of Northern New Jersey, organized educational activity is at a high level. In Camden and Middlesex Counties, various departmental staff conferences at the Cooper, West Jersey, and St. Peter's General Hospitals, and the Roosevelt Hospital for Diseases of the Chest, are especially well organized and publicized, and are very valuable educational facilities for the practicing physicians in these areas. It is also true that in every county there are many physicians interested in some particular phase of medical education who seek and attain this on their own initiative, but the survey in general does indicate the need for a properly staffed organizing agency to further these graduate studies throughout the state. An acquaintance with graduate educational efforts made individually and collectively by the physicians of this state cannot fail to evoke a feeling of pride in the intellectual and professional interest and attainments of the members of our calling.

ANNUAL MEETING

Jerome G. Kaufman, M.D., Chairman, Newark

At the request of the Board of Trustees our committee studied the section meetings, "for better solution and planning", as recommended by the House of Delegates in 1952.

Our committee felt that it was committed to 11 section meetings in 1953, in view of the section vote last year and the fact that of the 16 sections indicated for alternate year meetings, 8 had the opportunity of meeting in 1952; the other 8 should have the same opportunity in 1953 before any further change is made. We agreed with last year's Reference Committee that other sections were of sufficient interest to warrant annual meetings. However, we also felt that there are too many sections, that they are too specialized and therefore only interest a limited number of members, whereas all section meetings should be aimed toward the general membership.

It was the feeling of the committee that the 1952 program was too crowded and did not leave sufficient time between sessions. It was not thought advisable to schedule meetings on Thursday and suggested that the first session

of the House of Delegates be held on Sunday afternoon.

The following recommendations were made to the Board of Trustees:

1. That the 1953 annual meeting be held to the 11 section meetings as voted by the section officers in 1952.
2. That the annual meeting start on Sunday, May 17 and close on Wednesday, May 20, 1953.
3. That the trustees appoint a committee to study the whole question of scientific sections, and submit to the 1953 House of Delegates its recommendations on sections and meetings of sections to be followed in 1954 and thereafter.

Our report was accepted by the trustees, the recommendations approved, and a special study committee appointed.

In October a meeting was held with the officers of the sections meeting in 1953. They were requested that, if possible, they include papers of interest to those sections who are not meeting. The policy of the Society was stressed—that all section programs be planned for the interest of the general membership and not primarily for the interest of the specialist groups.

The advance program of the 1953 annual meeting was mailed to the membership in February.

Your committee reiterates that the financial success of the entire annual meeting is due to the rental of booth spaces by the technical exhibitors. They bring to us their latest products and it is to our benefit to visit their exhibits. By doing so we thank them for carrying the convention costs.

We sincerely hope that all members attending the annual meeting will visit the exhibits—technical, scientific, and educational. All are planned for the membership and the membership can gain much by making a tour of the exhibit hall.

RECOMMENDATION

Tentative reservation has been made with the management of Haddon Hall to hold the 188th Annual Meeting at Haddon Hall on Sunday, Monday, Tuesday, and Wednesday, May 16, 17, 18, and 19, 1954. Our Committee recommends approval of these dates and place of meeting in 1954.

SCIENTIFIC PROGRAM

JOHANNES F. PESSEL, M.D., Chairman, Trenton

There has been an increased demand by the membership to have all sections represented at the meeting at each session. This, as you know, is a physical impossibility because of lack of space and time. It would require a meeting a week long and many more rooms. Hence it has been difficult to satisfy all groups. We have decided that the 1953 meeting should include all who had no meetings last year. We have suggested that allied subjects include papers in their program which might be of interest to other groups, for example, proctology with gastro-enterology, chest surgery in the division of chest diseases, etc. In most instances, the committees have cooperated in helping us devise such a program which we hope will be satisfactory to as many as possible.

We must remember that this annual meeting is primarily designed to give the membership an opportunity to express themselves in work that they have been doing or in which they are particularly interested. Many committees continue to build up their programs by inviting outside speakers to attract larger audiences. This would be ideal for everyone concerned, but rules out the possibility of having our own members, particularly our younger men, give papers which, we believe, should be presented to the Society. This is the time and place for our growing and developing young physicians to bring their ideas in for discussion. For that reason we, our committee, would like to make the following recommendations:

1. The membership should be re-informed that the rules permit only one guest speaker to each section even though it may seem desirable to have more in some instances.
2. As it is impossible to give each section a place on the program each year, a rotating system must be set up so that the smaller sections may present their topics every second year.
3. Those sections that do not have a participating meeting during the session should have a luncheon or dinner in order to preserve their identity and their organization.

4. The House of Delegates and the executive department of our Society should decide which sections shall be permitted to have annual meetings. At the present time Medicine, Surgery, and General Practice enjoy this privilege. It must be decided whether some of the other specialities shou'd be included in this list of annual privileges.

I wish to take this opportunity to thank my committee members and all the chairmen and secretaries of the individual sections most cordially for their great cooperation, help, and continued support in making this program for 1953 such an outstanding one.

SCIENTIFIC EXHIBIT

Asher Yaguda, M.D., Chairman, Newark

The Scientific Exhibit Committee has accepted applications for thirty-two outstanding exhibits for the Annual Meeting of 1953. A number of applications had to be rejected because of lack of space. It was also necessary to cut down the space allotment for many of the applications. As far as possible the exhibits have been arranged in sections so that related exhibits will be grouped.

We are pleased to have excellent exhibits on neoplastic diseases, gastro-intestinal diseases and heart diseases. We are sure that careful study of these exhibits will be of great help to the doctors of New Jersey in acquainting them with the latest scientific work in these fields.

SPECIAL COMMITTEE

MEDICAL RESEARCH

Ray E. Trussell, M.D., Chairman, Flemington

The Committee has met twice to discuss policy and function. The immediate outcome of this was the preparation of a statement for The Journal, which appeared on page 156 of the April issue.

The Committee met jointly with the Public Health and Public Relations Committees to develop recommended policy regarding gamma globulin as a prophylactic for poliomyelitis.

The Committee records with regret the resignation of its first chairman, Dr. Carlisle. Certain unavoidable delays have led to a late beginning of activities, but it now appears that the Committee is prepared to deal with problems which may be referred to it appropriately.

SUBCOMMITTEES

MEDICAL PRACTICE

Lewis C. Fritts, M.D., Chairman, Somerville

The Subcommittee on Medical Practice and its eleven Advisory Committees have conscientiously considered all problems before them during the year and have made recommendations beneficial to the public and the profession.

The Advisory Committees have been diligent in their participation and their work is reflected in their individual reports and recommendations.

Four meetings have been held with an average of 75 per cent attendance. The programs of the Advisory Committees for the year were reviewed early in the year and at later meetings progress reports were considered. The Subcommittee attempted to guide the Advisory Committees; at times when the reports were not specific they were returned for further study and more detailed information.

The Board of Trustees referred several matters to the Subcommittee for study and investigation. These matters have all been cleared and our reports made to the Trustees. They included resolutions from the New Jersey Pharmaceutical Association regarding prescription blanks imprinted with a pharmacist's name and address; state fees for injured employees; inquiry from a rescue squad regarding emergency treatment; classified telephone directory listings; the Veterans Administration fee schedule; and the requirements for approval of hospitals by the American Board of Oral (Dental) Surgery.

The work of the Subcommittee has been diversified and interesting and I wish to thank my committee members and the members of the Advisory Committees for their advice and cooperation.

PUBLIC HEALTH

Kenneth E. Gardner, M.D., Chairman, Bloomfield

During the past year at the suggestion of Dr. Elton W. Lance, the Subcommittee on Public Health held its quarterly meetings three weeks in advance of the Welfare Committee meeting. This suggestion provided the subcommittee with more time to discuss the many recommendations of the Public Health Committees and general public health problems; and to prepare more comprehensive reports for the Welfare Committee.

The public health committees have all been active in their respective fields and have made many valuable recommendations which have been studied and approved by the Subcommittee on Public Health, the Welfare Committee and the Board of Trustees. The report of each individual committee will appear separately.

An acute awareness of public health needs, with constructive recommendations and a program by the medical society in cooperation with the State Department of Health, is fundamentally essential to medical progress, to the community and to the individual. One of our society's best public relations assets is the tangible result which the community and the individual can obtain from well organized and medically sponsored public health and educational programs.

The Medical Society sponsored "Better Breakfast Week", October 19-25, 1952, under the direction of the Nutrition Committee. This public health project received so much favorable comment that the plan of organization will be published by the Cereal Institute of Chicago, early this spring as a reference manual. It will be distributed to each state medical society in the United

States, to all public libraries and through the American Medical Association.

During the current year the Subcommittee on Public Health met with representatives of the State Department of Health, the American National Red Cross, the National Foundation for Infantile Paralysis, and the Medical Research Committee, to evaluate the use, availability and distribution of gamma globulin for the prevention of poliomyelitis. The conference came to the following conclusions:

1. There is considerable evidence to indicate that gamma globulin has some definite value in the prevention of poliomyelitis for a period of two to five weeks.

2. Approximately 1,000,000 units will be available nationally for this summer.

3. These units will be distributed under the direction of the Office of Defense Mobilization to those areas where epidemics are considered to exist.

4. A vaccine is now being developed, which may prove to be effective, but is not available at present for general use.

5. The public should be informed through news releases concerning these facts and of the limited use, availability and distribution of gamma globulin.

One of the most important problems with which the medical profession is constantly confronted is chronic illness. A preliminary survey of the public health committees showed a widespread interest in this problem. Many valuable suggestions were received from these committees for developing a Chronic Illness Program. In addition to the health problem, there is usually an associated economic problem. Both of these must be considered in any study of chronic illness.

The following recommendations are now being considered by the Subcommittee on Public Health:

1. A standard form for routine health maintenance screening examinations.

2. Courses for physicians in the prevention, care, treatment and rehabilitation of the chronically ill.

3. Resources available through social and welfare agencies and foundations to aid with the economic problems.

4. An educational program for the public concerning the value of routine health examinations; the value of and facilities for rehabilitation; and the value of privately owned and operated health insurance plans, as the Hospital Service Plan, the Medical-Surgical Plan, and the Catastrophic Illness Insurance Plans.

The Medical Society must take the initiative in studying the ways and means to provide a program for the chronic illness problem. In so doing, it has been assured the wholehearted cooperation of the Division of Chronic Illness Control in the State Department of Health.

An excellent report, part of which is included in this report, has just been received from G. Frederick Moench, M.D., who was designated as the representative from The Medical Society of New Jersey to the Eighth National Conference on Rural Health.

The theme of the conference was "Widening The Highway To Health". Some of the main subjects discussed at the conference were as follows:

1. Progress in securing physicians for rural areas through local community enterprise—communities are now providing essential equipment for clinics and hospitals to attract new physicians.

2. Educational programs for better nutrition and dental care in rural areas.

3. State loans to medical students who agree to practice in rural areas.

4. Progress in developing medical insurance plans for rural areas through the Farm Bureau, the Grange and church groups.

5. Progress in developing local health councils.

The Medical Society of New Jersey has been invited to become an active participant in future conference programs.

PUBLIC RELATIONS

Frank S. Forte, M.D., Chairman, Newark

The reorganization meeting of the Subcommittee on Public Relations for the current administration was held on June 22, 1952, at the Society's headquarters in Trenton.

At the reorganization meeting items such as Health Hints, Junior Health Hints, the monthly Membership News Letter, the Quarterly News Letter to Cooperating Agencies and other methods for promoting good public relations were left intact because of their soundness.

The committee then formulated its 1952-1953 program based on the tenth of Dr. Har-

rold Murray's ten challenges to medicine, namely, "We must promote better public relations."

Our primary goal has been to make each doctor realize that he is a public relations agent and that he is in fact its basic unit. In addition our aim has been to have each member assume and acquaint himself with his responsibility in achieving good public relations for medicine.

To point up this objective the committee agreed upon a slogan for the year and various media to bring it to the attention of the members. The slogan chosen was "Public Relations For Medicine, Means Personal Responsibility For You."

It should be a source of great pride that the American Medical Association, through the publication P R Doctor, which is issued by the Public Relations Department, has given commendation and nationwide publicity to our slogan. P R Doctor comments: "It's a concept which every county and state medical society in America will want to adopt."

Membership Plaque

As an added means of stressing this personal participation and of calling it to the attention of the public, a plaque was decided upon and distributed. It emphasizes the ideals of care and service to which the members of The Medical Society of New Jersey are pledged.

The certificate which forms the body of the plaque presents the name of the individual member followed by these words:—

> is a member of The Medical Society of New Jersey and is therefore, pledged to uphold the highest standard of practice in the tradition of his chosen profession.
>
> Hence, fees within the patient's ability to pay; dependability to render needed service; participation in community activities together with his fellow citizens are constantly his special concern.
>
> His earnest desire is to improve patient-doctor relationship at every turn.

The plaque was mailed to every member in good standing on March 30, 1953 accompanied by a request that it be displayed in a prominent place.

Future plaques for new members will be issued and signed by the incumbent president and secretary.

Orientation of New Members

Owing to the pressure placed upon our profession for good medical public relations we are faced with the problem of intramural education in this field. In order to help our new members to understand this problem better the committee is preparing a preliminary report on a booklet entitled, "Your Medical Society: Membership, Privileges, Responsibilities and Services."

All pertinent information for intelligent and beneficial membership shall be included in this booklet. September 1953 has been set as a tentative date for the presentation of the preliminary report. Should this booklet prove satisfactory a distribution to the entire membership is advisable.

Along this same line, the committee has seen fit to recommend that each county society have an "Orientation Committe for New Members". The process of indoctrination of new members as to their rights, privileges and duties to medicine and their community should be undertaken by senior members. It must be remembered that new members are in need of their help and guidance. The committee feels that such a booklet would be a great help to both old and new members.

Exhibit at the New Jersey State Fair

At the meeting of the Board of Trustees on July 13, The Medical Society of New Jersey was invited by the State Department of Health, through Commissioner Bergsma, to participate in an exhibit at the New Jersey State Fair in Trenton, September 21 through 28, 1952.

The Board approved the presentation of an exhibit at the fair under the jurisdiction of the Public Relations Committee and recommended that the following positive programs be emphasized:

a. Physicians Placement Bureau
b. Local Health Services
c. Needs of the Chronically Ill
d. Medical Research
e. Medical-Dental School
f. Medical-Surgical Plan
g. Emergency Medical Service
h. Judicial Council
i. Public Relations
j. Making More Hospital Beds Available.

This exhibit was undertaken with gratifying results.

Better Breakfast Week

"Better Breakfast Week" was held October 19-25, 1952 by the Advisory Committee on Nutrition under the guidance of the Subcommittee on Public Health.

While this program was undertaken as primarily a public health project it became, as anticipated, a bonanza of good public relations.

It is a good example of how doctors can work with their fellow citizens on community activities. The end of the great amount of favorable publicity for our society is still not in sight because a book covering this program is being published.

A distribution of 8,000 copies of this book is expected on a national and international basis to both professional and non-professional groups.

Public Relations Institute of A.M.A.

The first Public Relations Institute of the American Medical Association, held in Chicago, on September 4 and 5, was attended by the chairman. Hawaii, Canada and forty-two of our own states were represented. A full two-day session was held during which time every worthwhile phase of public relations was considered.

We are happy to report that The Medical Society of New Jersey measured up to the standard set by that important conference. However, there are two points of interest that should be brought to your attention. One is that our society has been spending very little money on public relations in contrast to other societies of comparable size. The second is the urgent need of a full time trained public relations officer. Delay only impairs our peak efficiency in this important field.

Speakers Bureau

A Speakers Bureau for The Medical Society of New Jersey has been established. Its purpose is to give service on state level problems only.

The speakers bureaus, on a county level, are doing an efficient job. These groups constitute one of the most potent forces in our public relations armamentarium. Close cooperation is most desirable.

RECOMMENDATIONS

1. Every doctor should remember that public relations begins and rests with him.
2. Each county society should use an effective "orientation committee" to indoctrinate new members as to their rights, privileges and duties upon entering the society.
3. The employment of a full time public relations officer as soon as feasible is urged.
4. County societies should be encouraged to pick out public relations men on the basis of capability and willingness to work.
5. Public relations training program on a state level for the training of public relations officers for the component 21 county societies is suggested.

At the county and state level the Woman's Auxiliary is doing an excellent job. From a public relations viewpoint, however, we find the Auxiliary membership inadequate.

We wish to recommend that a plan be devised in the near future whereby every member of our society will have a female representative in the Woman's Auxiliary.

With a membership of over 5,000 nobody should underestimate the beneficial influence in medical public relations accruing from an auxiliary of more than 5,000 women. This is a challenge, but then, so is public relations.

This has been a gratifying year and we believe that we have met the tenth challenge, "We must promote better public relations."

PUBLIC HEALTH ADVISORY COMMITTEES

CANCER CONTROL

Asher Yaguda, M.D., Chairman, Newark

The Advisory Committee on Cancer Control operated this year under a new policy instituted by the withdrawal of cooperation by the American Cancer Society, New Jersey Division. As a result of the action of this organization, the Advisory Committee on Cancer Control of The Medical Society of New Jersey operated independently of the American Cancer Society, New Jersey Division.

We were fortunate, however, in having very close cooperation with the Cancer Division of the Department of Health of the State of New Jersey and the New Jersey Society of Clinical Pathologists.

As a result of the activities of this committee a series of symposia on the "Early Diagnosis of Cancer" aimed at the instruction of the general practitioner, was held on March 26, at the Hotel Traymore, Atlantic City; on April 1, at the Monmouth Memorial Hospital, Long Branch; and on April 29 at the Academy of Medicine of Northern New Jersey, Newark. These symposia occupied the entire day and the program included well-known authorities in the various fields of cancer diagnosis. In addition to this, a series of full-day graduate lectures designed to acquaint physicians engaged in the treatment of cancer with the latest developments in detection, diagnosis and treatment was held in cooperation with the staff of the McKinley Memorial Hospital in Trenton and the Columbia University faculty of Medicine on March 10, March 18, and March 26. The committee feels that this educational program was very worthwhile and should be expanded in the state as a regular part of the program of the Advisory Committee on Cancer Control.

Through the cooperation of the Cancer Division of the Department of Health of New Jersey funds were made available for the purchase of equipment to be supplied to the hospitals of this state for the purpose of stimulating greater interest in the preservation and study of cancer material. With this support the Advisory Committee is supplying these hospital laboratories which have requested this type of equipment with a complete filing system for the organization of cancer registries in each hospital. Additional funds have been applied to the purchase of photographic and projection equipment so that cancer material could be presented properly before hospital staff conferences. We feel that this will be of distinct benefit to the program of cancer control.

The committee has also prepared a brochure describing cytologic methods and biopsy technics for obtaining material for early diagnosis of cancer. Included in the brochure will be a list of cooperating pathologists arranged by counties so that the physician will know where to send cytologic and biopsy material for processing. This brochure will be contained in a loose leaf binder and will be distributed to every physician in the state who is a member of The Medical Society of New Jersey. All of the cost of preparing this brochure has been assumed by the Cancer Division of the State Department of Health.

In addition to the distribution of these brochures an exhibit has been prepared by the Advisory Committee for the annual meeting in May.

The committee wishes at this time to thank Drs. Marian Stanford, Edwin Merrill, E. L. Shaffer, Miriam Sachs of the State Department of Health and Thomas K. Rathmell, representing the New Jersey Society of Clinical Pathologists for their splendid cooperation without which the accomplishments of this committee would have been limited.

CARDIOVASCULAR DISEASES

JOHN H. ROWLAND, M.D., Chairman, New Brunswick

The accomplishments of this committee are as follows:

I. Definition of function:

1. To assume the leadership for The Medical Society of New Jersey in initiating, cooperating, and coordinating various projects for the welfare of the cardiovascular patient.

2. To study the problems of the cardiovascular patient in various parts of the state to determine whether better facilities are needed for diagnosis and treatment, with particular reference to the indigent patient.

3. To determine the number of cardiac clinics within the state.

4. To cooperate with other agencies in the welfare of the cardiovascular patient.

5. To advise the county committees on cardiovascular disease as to what is being done within the state in order that each county may cooperate in making the state program more successful.

6. To familiarize the public with what is being done and what is necessary for the cardiovascular patient.

7. To encourage the appointment of committees on cardiovascular diseases in counties where such a committee does not exist.

8. To stimulate, when necessary, the proper cooperation and coordination between the county cardiovascular disease committees and other interested organizations.

II. Questionnaires were sent out to determine the activity of the county committees on cardiovascular disease, to determine whether the county committees are cooperating with other organizations interested in the cardiovascular patient, and to determine the number of clinics in each county.

III. Clinics are available for diagnosis and treatment in the following counties:

Camden County
- Heart Clinic of Cooper Hospital, Camden
- Heart Clinic of West Jersey Hospital, Camden

Essex County
- Babies' Hospital, Coit Memorial, Newark
- Beth Israel Hospital, Newark
- Columbus Hospital, Newark
- Clara Maass Memorial Hospital, Newark
- Presbyterian Hospital, Newark
- Hospital of St. Barnabas, Newark
- St. James' Hospital, Newark
- St. Michael's Hospital, Newark
- Newark Health Department, Newark
- East Orange General Hospital, East Orange
- Orange Memorial Hospital, Orange
- St. Mary's Hospital, Orange
- Irvington General Hospital, Irvington
- Mountainside Hospital, Montclair

Hudson County
- Bayonne Hospital, Bayonne
- Medical Center, Jersey City
- St. Francis Hospital, Jersey City
- North Hudson Hospital, Jersey City
- Christ Hospital, Jersey City

Mercer County
- McKinley Hospital, Trenton
- Mercer Hospital, Trenton
- St. Francis Hospital, Trenton

Middlesex County
- Middlesex General Hospital, New Brunswick
- St. Peter's General Hospital, New Brunswick
- Perth Amboy General Hospital, Perth Amboy

Monmouth County
- Monmouth Memorial Hospital, Long Branch
- Fitkin Memorial Hospital, Neptune

Somerset County
- Somerset General Hospital, Somerville

Union County
- Elizabeth General Hospital, Elizabeth
- St. Elizabeth's Hospital, Elizabeth
- Muhlenberg Hospital, Plainfield.

Cumberland County, in conjunction with its county heart association, plans to open three clinics at Millville, Bridgeton and Newcomb Hospitals (Vineland).

Hunterdon will have a clinic available when the Hunterdon Medical Center, Flemington, opens about July 1, 1953.

IV. The main project of the committee during 1952-53 was to establish cardiovascular clinics in various locations throughout the state for the cardiac in industry.

Two evaluation clinics for the cardiac in industry are already established and functioning at the St. Michael's and at the Beth Israel Hospitals, Newark.

Other clinics are in the process of being formed in Camden, Trenton and New Brunswick.

V. The committee was responsible for committees on cardiovascular diseases being appointed in the following counties: Gloucester, Hudson, Hunterdon, Morris, Sussex, and Warren. Committees on cardiovascular diseases now have been appointed in all the counties except Cape May.

VI. The committee is cooperating in giv-

ing advice to the Subcommittee on Public Health and to the Subcommittee on Medical Practice.

It has been difficult to get complete cooperation from all of the county committees and it will require additional effort. This committee is able to act only in an advisory capacity. While the interest of this committee is of high caliber, energetic and enthusiastic, the actual accomplishments for the project must necessarily be produced by the county committees.

RECOMMENDATIONS

1. A continued effort to establish sufficient and adequate evaluation clinics for the cardiac in industry.

2. Establishment of additional and sufficient facilities for cardiac surgery.

3. The appointment of physicians on the cardiovascular committee who are interested in the project.

4. Education of health groups and public service organizations, etc., regarding the requirements of the cardiovascular patient.

5. Formulation of a publicity campaign to insure the success of our project.

6. Enactment of appropriate legislation so that the cardiovascular patient can sign a waiver of his evaluated permanent disability in order that he may be employed by industry. Industry, at the present time, has not cooperated fully in many instances due to the workmen's compensation liability involvement.

CHILD HEALTH

FREDERIC W. LATHROP, M.D., Chairman, Plainfield

The Advisory Committee on Child Health this year continued working toward providing the best possible medical care to every child in the state of New Jersey.

We cooperated with the Advisory Committee on Maternal Health in preparing a survey of the mortality in premature infants, which should be used by obstetricians and pediatricians throughout the state. The mortality of premature and new-born infants remains the most important challenge we still must conquer to save more lives of infants and children.

The modernization of procedures for the quarantine and isolation of contagious diseases, which we helped to prepare, has been almost completed by the Department of Health of the State of New Jersey. These new regulations will be promulgated through the local health officers in the near future.

The committee studied a proposed new adoption law, intended to encourage adoptions through recognized adoption agencies, to safeguard the interests particularly of the child, but also of the natural mother and of the adopting parents. We referred this new law to the Legislative Committee for their approval, but we urge the support of the members of The Medical Society of New Jersey in order to make the law effective.

RECOMMENDATIONS

1. That the survey of premature infants of the Advisory Committee on Maternal Health be approved.

2. That the new adoption law receive the support of The Medical Society of New Jersey.

CONSERVATION OF VISION AND HEARING

REINOLD W. TERKUILE, M.D., Chairman, Ridgewood

During its 1952-53 season the Advisory Committee on Conservation of Vision and Hearing has resumed its work on standards for vision and hearing testing in our public schools. It has recently presented to the State Medical Society, through the Public Health Committee Chairman, Dr. Kenneth Gardner, proposals for standards of vision and hearing testing in our public schools, which it hopes will be officially adopted by the State Medical Society. These proposals embody the committee's long established concepts of simple, adequate tests for vision and hearing to be done by the medical personnel already functioning in our public schools and not involving added expense for complicated devices or salaries. The proposals are also consistent with our official stand that these tests should never be diagnostic in nature, nor should they be divorced from the general physical examination.

They are, like the rest of the physical examination, purely detection procedures. The findings on examination by the present school medical authorities plus the teacher classroom observations on behavior and progress make up, in our opinion, adequate methods for detecting the presence of vision and hearing defects. We see no justification for the introduction of more complicated tests for vision. That is the function of the proper medical specialty examinations when the child is referred by the school medical authorities for further study, diagnosis and treatment.

The committee has also offered to aid the Motor Vehicle Department in studying the role of vision and hearing defects among motor vehicle operators involved in traffic accidents. Several members of our committee have been asked to gather available data on this subject.

We are also making headway in our efforts to educate the public on the vital importance of early eye examinations in children. It is strongly urged that every child be examined by his fourth year especially if no visual defects are noted, and that a child showing symptoms of defective vision or any evidence of crossing, etc., be examined immediately, regardless of age. Advice to "let the child grow out of it" or "wait until he is older" before examination is not only fallacious but often makes it impossible to help the child visually.

This committee has made preparations for enlarging its activities in the fields of vision and hearing testing.

MATERNAL WELFARE

John D. Preece, M.D., Chairman, Trenton

The Maternal Welfare Committee had two major meetings this year, one in the autumn and one in the spring. Each was well attended.

The March meeting included the field physicians of the committee from each county in the state. With the counsel of Dr. Harrold Murray it was decided that at each future yearly meeting of this group an invitation be extended to a medical board member of any hospital having cases where the committee felt additional help or support might have proved beneficial. The board member is to be invited to the meeting for discussion with the committee of ways to reduce maternal mortality in his area.

The project for the reduction of neonatal mortality was also inaugurated this year. A subcommittee of obstetricians, pediatricians and an anesthetist was appointed by Dr. Murray to study neonatal mortality. A questionnaire was drawn up and approved. A pilot study in the hospitals of one county of the state will be started immediately. From this study a set of rules can be formulated for a state-wide study to be started within the year.

The Maternal Welfare Committee's work of recording reports and tabulating statistics is going on as usual under the supervision of Dr. Zindwer of the State Department of Health. This phase is not as dramatic as the open meetings, but fully as important. It is this constant checking which makes the work of the committee effective.

The committee is happy to report that the general overall picture of obstetrics in the state is excellent.

MENTAL HYGIENE

Harrison F. English, M.D., Chairman, Trenton

The Advisory Committee on Mental Hygiene of The Medical Society of New Jersey has met three times during the administrative year just closing; in June and October of 1952 and in February of this year. All meetings were held in Newark, in the office of Dr. Lewis Loeser, secretary of the committee. In addition to the routine correspondence from lay groups interested in various aspects of mental health, the committee dealt with several major problems.

It endorsed changes in the Medical Practice

Act which have been recommended by a joint committee of the American Psychiatric Association and the Section on Mental and Nervous Diseases of the American Medical Association, and encouraged the adoption of these changes by the New Jersey Society. The purpose of these proposed changes is to bring about greater uniformity of the medical practice acts of the various states, and to embrace more completely most forms of mental therapy within the province of medicine, with the view of protecting the public from a large part of the quackery to which it is now subjected.

The committee passed a resolution approving the plan to convert the Skillman colony for epileptics into a neuropsychiatric and rehabilitation center.

In connection with the committee's additional function, as Advisory Committee for the Epilepsy Project, it took an active part in the arranging of a program for an Institute on Epilepsy held in Newark in October 1952, and is cooperating with the arrangements for two additional institutes on the same subject this spring, one to be held in Monmouth County during the month of April and another in Morris County in May.

The committee has responded to inquiries from the New Jersey Association for Mental Health and has indicated a willingness to serve with them in an advisory capacity.

RECOMMENDATIONS

This committee is making an effort to overcome much of the duplication in mental health activities by coordinating the activities of the county committees with the state committee, and by encouraging county committees to assist, in an advisory capacity, local lay committees dealing with mental health subjects. Until this is accomplished, no further recommendations will be submitted.

NUTRITION

S. William Kalb, M.D., Chairman, Newark

The main project of the Committee was a Better Breakfast Week program which was held October 19-25, 1952.

A subcommittee consisting of the President of The Medical Society of New Jersey, the representatives from the State Department of Health, State Department of Education, and the New Jersey Nutrition Council met with the chairman of the Nutrition Committee to formulate the initial plans in outlining this project.

Eighty organizations participated, which included the county medical societies and auxiliaries, labor groups, women's groups, Parent-Teacher Associations, Girl Scouts, Boy Scouts, welfare groups, dentists, pharmacists, hospitals, nurses, drug manufacturers, and many other professional and non-medical groups.

Exhibits were displayed in department stores, banks, restaurants, hotels, libraries, and industrial plans. Buses carried posters. Over one million pieces of literature were distributed through grocery stores, bakeries, dairies, and schools. There were poster contests in schools with prizes awarded. The Governor of New Jersey and many mayors of cities issued proclamations. Physicians and nutritionists gave lectures explaining the need for an adequate breakfast to many groups. We feel that we have alerted the people of the state of New Jersey to the importance of a better breakfast and adequate nutrition in general.

In recent years many pediatricians and general practitioners have been prescribing cola syrups for nausea and vomiting. On the basis of this advice many mothers have been giving their children carbonated cola beverage instead of the syrup feeling that this would help them with the nausea and vomiting and also serve as a prophylaxis against it. As a result of this, cola beverage has replaced milk in the diets of many children and the Nutrition Committee feels that this is an alarming situation.

The active ingredient in the prescribed syrup is phosphorated carbohydrate solution which is also present in some ethical preparations on the market and should be designated as such instead of commercial cola syrup until a Latin name for this syrup can be found.

It is also recommended that a letter be sent to the Commissioner of Education requesting that some effort be made to remove candy and cola dispensing machines from the schools. The purpose of this is to cooperate with the many programs that are in existence to preserve the teeth of school children.

REHABILITATION

HENRY H. KESSLER, M.D., Chairman, Newark

It was the opinion of this committee that its most important function would be to disseminate rehabilitation information to the profession. The lack of such information was pointed out, and it was felt that if the profession were made aware of the aims and purposes of rehabilitation, the establishment of additional rehabilitation centers and facilities in the state would be accelerated.

It was decided to sponsor a series of articles on various aspects of rehabilitation, for publication in the state JOURNAL. An article by one of the members, (Henry A. Brodkin, M.D., Newark) appeared in the April issue. Subsequent articles will be written by committee members. These articles will relate the methods and technics of rehabilitation to the various medical specialties.

The committee decided to submit news releases regularly to the bulletins of the county medical societies.

The committee plans to organize a modest literature table, to be displayed at the Region II convention of the National Rehabilitation Association which will be held in Atlantic City during the early part of May.

Among future plans of the committee is the sponsorship of a workshop on rehabilitation, to be held during National Employ the Physically Handicapped Week in October. Meeting space for this workshop was offered at the Kessler Institute for Rehabilitation. The committee plans to have one or two prominent speakers in the field of rehabilitation appear in the morning and panel discussions about various aspects of rehabilitation for the afternoon program.

Long range plans of the committee include the organization of subgroups of the advisory committee in the various counties, sponsorship of a radio or television program about rehabilitation activities, and the stimulation of increased interest in rehabilitation by having committee members accept speaking assignments before professional and lay groups. A primary purpose of the professional education program is to acquaint physicians in the state with existing rehabilitation facilities, so that they may make more effective use of these facilities. Another objective of the professional education program is to establish liaison with labor and management groups so that restored persons can be absorbed into industry as effectively as possible.

RECOMMENDATIONS:

The members of the Advisory Committee on Rehabilitation feel that its identity should be preserved for longer than one year, so that it may accomplish these immediate and long-range objectives.

The members also believe that the base of the committee should be continually broadened, so that physicians representing all disability groups will be brought into the committee. The committee recognizes that the rehabilitation process is not confined to orthopedic cases, but can be applied with great effectiveness to almost all patients who have long-term or chronic physical or emotional disabilities.

RURAL HEALTH - COMMUNITY HEALTH

MARY BACON, M.D., Chairman, Bridgeton

The Rural Health-Community Health Program of the State Society was developed and put into operation by the Woman's Auxiliary as an educational program to improve public health in New Jersey. It was an outgrowth of the findings discovered during the formation of county councils for the improvement of school health services in 1947-48 which revealed inequalities existed in school health services in various areas. Most residents of such areas did not know what should be done to attain adequate public health services.

The original program operated by the Auxiliary from 1948 through 1952 was revised last summer. The new program consists of twenty-eight films covering eleven subjects: blindness, cancer, teeth, heart, home nursing, nutrition, public health, rehabilitation, safety, sanitation, and tuberculosis. Papers covering these subjects have been prepared by specialists in their fields for presentation at the time

the films are shown. All films and papers have been reviewed by your committee and approved.

A total of 140 full programs have been presented to date—films and papers presented by Auxiliary members or by physicians. In addition 24 films have been presented alone. These programs have been presented to an approximate audience of 11,000, and included such groups as women's clubs, Parent-Teacher Associations, men's clubs, public school classes, Junior Chambers of Commerce, church groups, hospital auxiliaries, fire company auxiliaries, American Legion auxiliaries, and reformatory classes.

The new Rural Health-Community Health Program is attracting widespread attention as evidenced by future bookings which indicate the popularity of the program and the interest of the public in public health subjects.

SCHOOL HEALTH

K. VIRGINIA MAURER, M.D., Chairman, Livingston

During 1952 the work of the committee has been directed primarily toward the formation of county school physicians' committees. We have written Dr. Blaisdell, chairman, Subcommittee on Legislation, asking that his committee recommend to Dr. Raubinger, State Commissioner of Education, the proposal and adoption of legislation requiring annual chest x-rays for all school personnel.

In an advisory capacity, we have assisted the New Jersey State Council for Improvement of School Health Services in the promotion of the Four Point Program and in planning their program on School Health Services to be given May 18, during the annual meeting. The committee takes this opportunity to express their appreciation, and compliment the Council for their splendid efforts in furthering the state-wide adoption of the four point program and for their active interest in all school health projects.

We recommend:

1. The formation of active committees of school physicians in the county medical societies.
2. Cooperation with the State Board of Education in the adoption of legislation requiring annual chest x-rays for all adult school personnel.
3. More active participation in the school health activities by school physicians.

VENEREAL DISEASE CONTROL

GEORGE W. IRMISCH, M.D., Chairman, Trenton

The Committee on Venereal Disease Control has met three times during the year, each time with the definite purpose of emphasizing to physicians that venereal disease is still with us. Dr. Adele Shepard, Chief of the Bureau of Venereal Disease Control of the State Department of Health, serves as consultant to our committee, and has attended our meetings and participated in the discussions.

The committee attended the Venereal Disease Seminar, sponsored by the Public Health Service and the New Jersey State Department of Health, in Atlantic City on April 1 and 2.

Three actions of the committee, which are approved by the Bureau of Venereal Disease Control, are recommended for approval. A fourth point, upon which definite agreement has not yet been reached, will be investigated further during the coming year.

RECOMMENDATIONS

1. That the physicians of New Jersey, through their county societies, notes in the *Newsletter*, and THE JOURNAL, be apprised of the medical and public health aspects of venereal disease control, and also reminded that venereal disease is still with us. It is suggested that venereal disease control committees of the county societies be reached directly at their meetings.
2. That each physician be sent twelve cards for reporting venereal diseases and with them a letter from the State Department of Health, "asking about their cases during the preceding year and encouraging them to report the cases as they are found in the succeeding year."
3. That on the cards for reporting venereal disease supplied by the State Department of Health, the question be added: "Do you wish to follow up the contacts or do you prefer that this case be investigated for contact study?"

MEDICAL PRACTICE ADVISORY COMMITTEES

GENERAL PRACTICE

Harry Taff, M.D., Chairman, Newark

The Advisory Committee on General Practice has met several times during the year and submits the following recommendations for the consideration of the House of Delegates:

RECOMMENDATIONS

1. Establishment of General Practice staffs in all general hospitals as a basis of accreditation for the hospitals.
2. Since the General Practitioner has been the "forgotten man" in organization activities, a special effort be made to have adequate representation for the General Practitioner.
3. Telephone book classification of all physicians by their specialties to create better public relations.
4. Medical-Surgical and similar plans to allow 25 to 33 per cent to assisting and referring physicians, with public knowledge. Furthermore, plans to pay physicians in their own offices for diagnostic and ambulatory work, thereby releasing hospital beds for the care of the sick. In our opinion, this one step would improve public relations greatly.
5. That only accredited general practitioners represent General Practice.
6. That Veterans Administration fees be amended per the following schedule:
   a. Day office visits, $3.00. Night office visits, $5.00. Day home and hospital visits, $5.00. First night home and hospital visits, $10.00; subsequent night hospital visits only, $6.00. $1.00 per mile outside of city.
   b. Detention with critical patient—$6.50 per hour during the day; $8.00 per hour during the night.
   c. Miscellaneous medical treatment fees as marked on the schedule in addition to visit fees as above.

GROUP PRACTICE

Sol Parent, M.D., Chairman, Newark

Adequate medical care embraces proper distribution of essential medical services, including availability of hospital and special facilities. Group practice is one means of attaining such care.

There is every reason to believe that the quality of medical service rendered by established group practice is high, and constitutes a credit to the profession as a whole.

Group medical practice offers its greatest effectiveness in selected areas where services of the various medical specialties are required for proper ambulatory diagnosis and treatment. This is currently available in various parts of the state.

The establishment of the American Association of Medical Clinics has helped materially in promoting higher standards of practice in medical clinics, and in providing a medium of interchange of ideas and experiences of member clinics.

The committee is gathering data on the present group practice facilities throughout New Jersey and their role in the distribution of adequate medical care.

It is recommended that the committee continue to study the relation of group practice to the community needs in different parts of the state.

LABORATORY MEDICINE

Edwin H. Albano, M.D., Chairman, East Orange

During the fiscal year, the meetings of the committee were held jointly with the executive committee of the New Jersey Society of Clinical Pathologists.

The following problems were studied: drafting legislation for the licensing of laboratory directors and the registration of bio-analytical laboratories; the formation of a commission on Blood Banks; the Veterans Administration fee schedule; the promotion of services for the diagnosis of virus diseases by the New Jersey State Board of Health; and the publication of articles in The Journal without proper appraisal of the subject matter and the opportunity for timely rebuttals on controversial subjects affecting interested parties of the Subcommittee on Medical Practice.

The intent of the bill for licensing laboratory directors and the registration of laboratories is primarily to regulate the practice of laboratory medicine and keep it within control of the New Jersey State Board of Medical Examiners. The bill was introduced in the present session of the New Jersey Legislature and successful passage of the bill is anticipated.

The committee proposed several changes in the Veterans Administration fee schedule in order to conform with the schedule of laboratory charges adopted by the New Jersey Society of Clinical Pathologists.

The committee also endorsed the following recommendation of the Blood Bank Committee of the New Jersey Society of Clinical Pathologists:

1. A Commission on Blood Banks be formed under the sponsorship of the New Jersey Society of Clinical Pathologists for the purpose of:
   a. Training personnel in proper blood bank technic.
   b. Standardizing blood bank technic.
   c. Establishment of a clearing house for blood banks.
   d. Integration of all blood bank facilities for Civil Defense and other purposes.
   e. Guiding research in this phase of clinical pathology.
2. The Commission on Blood Banks shall be the official representative of the New Jersey Society of Clinical Pathologists and The Medical Society of New Jersey in all procurement, banking and distribution matters.
3. The Commission on Blood Banks shall consist of 10 members. Two members shall be appointed for the term of one year by the president of The Medical Society of New Jersey. Eight members shall be appointed by the New Jersey Society of Clinical Pathologists for the period of two years on a rotating basis. However, at the inception, four members of the New Jersey Society of Clinical Pathologists shall be appointed only for a one year term of office.

All reports and recommendations have been submitted to the Subcommittee on Medical Practice and through that committee to the Welfare Committee and the Board of Trustees.

It has been a very active year and the chairman is sincerely appreciative of the splendid efforts of the committee members, and grateful for the help and guidance offered by the members of the executive committee of the New Jersey Society of Clinical Pathologists. The chairman also wishes to thank Dr. Daniel Bergsma, Commissioner of Health, and Dr. Harrold Murray for their sincere interest and valuable suggestions on many of the problems that confronted the committee during the past year.

PHARMACEUTICAL PROBLEMS

George M. Knowles, M.D., Chairman, Hackensack

Advertising in The Journal of The Medical Society of New Jersey and in the county medical society bulletins indicates tacit support and endorsement by The Journal and by the bulletins, and therefore carries a great deal of weight. The same applies to advertising in exhibits at the Annual Meeting of The Medical Society of New Jersey. We urge that

a. The Journal of The Medical Society of New Jersey follow the procedure of the Council on Pharmacy and Chemistry of the American

Medical Association regarding advertising and promotion of drug products.

b. The Advisory Committee on Pharmaceutical Problems and the President of The Medical Society of New Jersey be consulted in special instances when it is planning to authorize advertising of non-council accepted products.

c. Proof sheets of such advertising be sent to every member of the Advisory Committee for approval, reply to be given within 72 hours.

Examples of objectionable paid advertising are self evident to many physicians.

The committee feels that free advertising by printing so-called "clinical" reports on proprietary medications is of no unusual value, and in fact is harmful to THE JOURNAL.

The distribution of the New Jersey Formulary to osteopaths licensed to practice medicine and surgery in New Jersey was approved by two members of the Advisory Committee and strongly disapproved by one member.

At present, the Formulary is distributed by The Medical Society of New Jersey to its members and by the New Jersey Pharmaceutical Association to pharmacists.

The educational program proposed by the advisory committee covers:

a. Proprietary versus non-proprietary prescriptions.
b. The hospital formulary.
c. The cost of medical care—a mutual problem.

The Advisory Committee on Pharmaceutical Problems of The Medical Society of New Jersey and a similar committee of the New Jersey Pharmaceutical Association comprise the Joint Committee on Professional Relations.

The Joint Committee exhibit at the Annual Meeting of The Medical Society of New Jersey in May will be a visual type exhibit emphasizing the salient features of the new federal and state laws regarding prescription writing. Interested physicians, particularly chairmen of county medical society pharmaceutical committees are asked to study the exhibit.

PHYSICAL MEDICINE

ELMER J. ELIAS, M.D., Chairman, Trenton

The Advisory Committee on Physical Medicine has met during the year and it is extremely gratifying to note the accomplishments to date. Physical medicine and rehabilitation has made a definite niche in the field of medicine and we are proud of our endeavors. However, there remains much to be done, and at a meeting held at the William McKinley Memorial Hospital in conjunction with the New Jersey Society of Physical Medicine and Rehabilitation, the following were discussed and acted upon:

RECOMMENDATIONS

1. That the fee schedule submitted to the Veterans Administration be considered as the acceptable standard of minimum charges for physical therapy.
2. Any legislation involving physical therapy technicians should be referred to the Advisory Committee on Physical Medicine for suggestions and further action.
3. That the Advisory Committee should have some voice in matters concerning the prevention and treatment of chronic illness. It is felt that much could be gained by all concerned if our group were consulted. Up to the present time there has been no contact with our committee on this problem.

WORKMEN'S COMPENSATION AND INDUSTRIAL HEALTH

Arthur F. Mangelsdorff, M.D., Chairman, Bound Brook

During the current year the Advisory Committee on Workmen's Compensation and Industrial Health formulated the following program:

I. PLANS—

1. To investigate ways and means of solving the problems of medical care in small industries. By:
   a. Education of general practitioners.
   b. Education of management.
   c. Grouping of small industries by geographical location.
2. The physically handicapped worker and his his place in industry received considerable attention. Rehabilitation of the handicapped was studied.
3. The cardiac patient in relation to employment was reviewed.

II. ASSISTANCE—

1. To the Educational Committee of the American Academy of General Practice in any way possible, to advance their plan of indoctrinating the general practitioners in the fundamentals of occupational medicine.
2. A report was submitted to the Subcommittee on Public Health in an endeavor to help them with the problem of routine health maintenance examinations.

III. PARTICIPATION—

1. In the Occupational Vision Conference held at Atlantic City in cooperation with Rutgers University.
2. The committee represented the State of New Jersey at the Congress on Industrial Health of the American Medical Association held at Chicago. A report of the work being done in New Jersey was submitted.

IV. ADVICE—

1. Advice was given concerning fees charged by individuals to insurance companies for occupational injuries.
2. Mercer County Medical Society was advised regarding the fee schedule proposed by the State of New Jersey for payment of compensation cases involving state employees.

V. SUGGESTIONS—

1. That the A.M.A. statement regarding "essentials of medical nursing service in industry" be adopted.
2. That support be given to the program of the industrial nurses being conducted at their workshop at Seton Hall University.

VI. RECOMMENDATIONS—

1. Continue to investigate the problem of the small industrial plant medical coverage.
2. Continue the investigation of the placement of the handicapped workers.

We have enjoyed excellent cooperation among the members of our committee and from the liaison officers assigned to us. We wish to thank the Subcommittee on Medical Practice and the executive and editorial staff of the State Society for their cooperation and assistance.

COOPERATING AGENCIES

STATE BOARD OF MEDICAL EXAMINERS OF NEW JERSEY

E. S. HALLINGER, M.D., Secretary, Trenton

During the period of January to December, 1952, the Board examined fifty-nine applicants for a license to practice medicine and surgery. Eleven of the applicants were graduates of osteopathic colleges.

The Board also examined twenty-seven applicants for a license to practice chiropody.

TABLE I

SHOWING NUMBER OF CANDIDATES FOR THE 1952 EXAMINATIONS, CLASSIFED AS GRADUATES OF MEDICAL COLLEGES IN THE UNITED STATES AND FOREIGN COUNTRIES

MEDICAL	Total Examined	Passed	Failed
United States			
Graduates of Medical Schools	34	34	
Graduates of Osteopathic Schools	11	11	
Great Britain	1	1	
Switzerland	3		3
Italy	10	2	8
CHIROPODY			
United States	27	18	9
Total	86	66	20

All candidates were citizens of the United States.

Three hundred and thirteen licenses were issued to applicants by endorsement of a license from another state, or a diploma from the National Board of Medical Examiners, who presented credentials to prove they could meet the requirements for examination that were in force in New Jersey at the time they were examined.

All credentials covering medical and hospital work submitted to the Board were verified by questionnaires sent to the colleges and hospitals in this country and abroad before a license was issued.

The laws governing the practice of medicine and surgery, osteopathy and chiropractic do not provide for an annual registration. The Board does not, therefore, know whether the number of licentiates in the state now in practice is increasing or decreasing.

TABLE II

LICENTIATES BY ENDORSEMENT CLASSIFIED AS GRADUATES OF MEDICAL COLLEGES IN THE UNITED STATES AND FOREIGN COUNTRIES

Countries	Total
United States	289
Great Britain	1
Canada	3
Austria	10
Switzerland	1
Italy	2
Czechoslovakia	2
Germany	1
France	1
Rumania	1
Hungary	2
	313

TABLE III

PHYSICIANS AND SURGEONS, OSTEOPATHS AND CHIROPODISTS ENDORSED TO OTHER STATES, LICENTIATES OF WHOSE DEATH THE BOARD RECEIVED A REPORT AND LICENSES REVOKED

Endorsed to Other States	Number
Physicians	53
Osteopaths	5
Chiropodists	1
Deceased	
Physicians	60
Osteopaths	1
Licenses Revoked	
Medical	4
Osteopathic	1
Midwifery	1
Midwifery (Suspended)	1
	127

Annual registration would give the Board accurate information relative to the number of physicians practicing in New Jersey and would enable the licensed physicians to assist the Board in enforcing the law by reporting unlicensed physicians in their vicinity.

The laws governing the practice of chiropody and midwifery provide for an annual registration and our records show a decrease of ten in the number of chiropodists registered on No-

vember 1, 1952, and a decrease of thirteen midwives on the same date, in comparison with the year ending November 1, 1951.

ENFORCEMENT

Following is a brief report of the Board's activities in enforcing the laws which they adminster:

COURT CASES—VIOLATION OF MEDICAL OR OTHER LAWS	
Convicted, Pleaded Guilty or Settled	45
Pending in the Courts	23
	68
HEARINGS BEFORE BOARD	
Licenses Revoked	
Medical	4
Osteopathy	1
Midwifery	1
Midwifery (Suspended)	1
	7
TYPE OF CASES INVESTIGATED	
Druggists practicing medicine	28
Prescribing herbs and drugs	21
Unlicensed medical doctors	32
Licensed chiropodists violating advertisement regulations	3
Practicing chiropody without a license	3
Licensed chiropodists exceeding license	1
Licensed chiropodists assisting an unlicensed person	1
Licensed chiropractors exceeding license	4
Unlicensed chiropractors	49
Unlicensed osteopaths	1
Naturopaths	9
Physiotherapists	15
Electrotherapists	3
Medical revocations	4
Osteopathic revocations	1
Midwifery revocations	1
Midwifery suspensions	1
Miscellaneous	15
	192
ANALYSIS OF INSPECTIONS AND INVESTIGATIONS	
Total number investigations and inspections made	192
Visits made and treatments received in making the investigations and inspections	872
Average number of visits per investigation	4.5

MEDICAL SERVICE ADMINISTRATION OF NEW JERSEY

THE BOARD OF GOVERNERS

During 1952 the activities of Medical Service Administration have been limited to the operation of the City of Newark Medical Plan.

This Plan, designed to meet the needs of the indigent and medically indigent of Newark, is a reimbursement plan rather than an insurance plan. It provides payment on a fee-for-service basis to physicians of the patients' choice for care of eligible persons confined to their homes by illnesses.

The Plan continues to be a successful demonstration of the cooperation of an official health agency with a voluntary agency controlled by the medical profession in solving the problem of medical care of the indigent and medically indigent. It continues to arouse nation-wide interest as a pioneer effort to solve this problem within the framework and approved principles of organized medicine.

The August 30, 1952 issue of *The Journal of the American Medical Association* carried an excellent article entiled "Medical Care for the Indigent in Newark, New Jersey". This article, the third in a series of studies made by the Council on Medical Service, presented a detailed and comprehensive picture of what is being done in Newark and Essex County.

In the February 1953 issue of *The Bulletin of the Essex County Medical Society,* Dr. Nicholas A. Antonius in his "Message from the President", using "Medical Assistance Procedures in Our County" as his theme, gave a fine delineation of the present and potential activities of Medical Service Administration.

Inasmuch as Medical Service Administration was designated to serve as a state-wide agency, it is strongly recommended that each member of The Medical Society of New Jersey avail himself of the information contained in the above two articles so that he may become acquainted with the potentialities inherent in Medical Service Administration. He should also learn the responsibility and privilege he may enjoy by introducing to his community this efficient program of providing medical care for the indigent by a direct payment method to the physician.

The following table depicts the experience

of the Plan over a seven year period, showing actual costs and reflecting the changing economic picture. In interpreting this table, may we remind you that "indigent" are those whose names appear on the welfare rolls of the City of Newark and that "medically indigent" are those who, in the opinion of the Social Service Bureau of the City Board of Health, while having a sufficient income to meet the routine cost of a satisfactory standard of living, are unable to pay for adequate medical care. Since the only well-defined group is the "indigent", the cost per capita in this report is limited to the indigent group. It is impossible to estimate the size of the medically-indigent population.

The figures pertaining to the medically indigent load consist only of those persons classified as medically indigent when requesting medical services, hence their costs are depicted on a cost per case basis rather than on a per capita basis.

The Plan has operated very smoothly in the past year. The relief load and the claims for relief cases have decreased approximately 25 per cent below 1951. The cost per capita of relief load has decreased from $1.83 per year in 1951 to $1.77 per year in 1952. The decline in the relief load is attributed to the continued high level of employment in northern New Jersey, and to legislation making it possible for totally disabled persons to be accepted by the Essex County Welfare Board.

Medical care of the indigent and medically indigent under a plan like the City of Newark Plan meets with the approval of patients, physicians and government agencies. The standard of medical care is higher and the cost to the government less than under other systems. The greatest financial saving is due to the fact that under such a plan, many people are cared for at home and fewer are hospitalized.

The Medical Service Administration has demonstrated its value as a medium for providing medical care to indigent and medically indigent persons on a reimbursement rather than an insurance basis.

Although at present the activities of the Administration are limited to the conduct of the Newark Plan, the existing procedure is applicable to similar situations arising elsewhere in New Jersey.

The Board of Governors wishes to express to The Medical Society of New Jersey their appreciation of the moral and financial support so generously given to the Medical Service Administration over the twelve years of its existence.

INDIGENT (RELIEF) PERSONS

Year	1946*	1947	1948	1949	1950	1951	1952
Mean number of persons on welfare rolls during year	2155	2995	4274	7986	8704	4977	3794
Value of approved services	$4,971.00	7,823.00	8,589.50	12,046.00	13,092.00	9,165.00	6,726.50
Cost per capita of relief load per year	2.30	2,61	2.00	1.51	1.50	1.83	1.77
per month	0.191	0.217	0.167	0.126	0.125	0.152	0.147

MEDICALLY INDIGENT CASES**

Number of cases during year	2950	2734	3283	4155	4446	3450	3409
Value of approved services	$9,556.50	10,633.50	12,775.50	15,119.50	15,298.50	13,705.50	11,366.00
Cost per case per year	3.23	3.89	3.89	3.639	3.441	3.972	3.334
per month	0.269	0.324	0.324	0.303	0.287	0.331	0.278

* In April 1946 fees payable to physicians were increased from $2.00 per day visit and $3.00 per night visit to $3.00 and $5.00, respectively.

** The word "case" means family as distinguished from "persons" referred to under report on indigent.

MEDICAL-SURGICAL PLAN OF NEW JERSEY

THE BOARD OF TRUSTEES

The year ending April 1, 1953 has been one of impressive growth and progress in the development of the Medical-Surgical Plan of New Jersey.

Appended to this report is a summary of the statistics reflecting the progress of the Plan by calendar year periods since its inception in 1942.

Most notable is the continued increase in the number of persons enrolled by the Plan. In January, 1953 the Plan enrolled its first millionth subscribing member and it has now become the sixth largest Blue Shield Plan in the United States in the number of persons enrolled.

Equally impressive has been the decrease in the ratio of administrative costs from 51 per cent of subscription income in 1942 to 10.8 per cent in 1952.

The fact that the Plan has been able in the past four years to reduce its operating expense ratio from 13.8 per cent to 10.8 per cent without increasing its subscription charges during that period, combined with a favorable claim experience of 79.6 per cent during 1952, has enabled the Plan to transfer to its earned reserve 9.6 per cent of subscriptions in that year.

In consequence, the Plan now has a reserve of $2.60 per enrolled person or the equivalent of 2.7 months of average claim and operating expense. This is better than the comparable reserve factors at the end of 1950 or 1951.

Essentially, the above figures indicate that approximately 90 cents of every dollar contributed to the Plan by its members are disbursed for the payment of medical services rendered, or transferred to reserve against future liabilities for medical services to be rendered.

EVOLUTION OF MEDICAL-SURGICAL PLAN

Medical-Surgical Plan, together with its sister Blue Shield Plans in other states, represents the positive and constructive program approved and supported by the organized medical profession to solve the basic problem of medical economics, which is to meet the public demand for a non-profit cooperative mechanism whereby the people may pre-pay costs of unpredictable and serious illness.

Medical-Surgical Plan of New Jersey has met with a most impressive response on the part of the public during its 11 years of existence. Today, the Plan's enrollment embraces approximately one out of every four people in New Jersey. Remarkable as this may be, it must be accepted as a challenge to the profession to achieve its purpose—the extension of the benefits of this Plan to the entire population of New Jersey.

The Blue Shield movement nationally is now serving more than 25 million people. It represents a partnership of employers, workers, farmers, commercial and professional people—together with the medical profession —dedicated to the proposition that physicians and their patients can solve their mutual economic problems through voluntary effort, and within the traditional framework of American medicine.

The basic problem which has continuously confronted the Board of Trustees of Medical-Surgical Plan is to provide the broadest scope of benefits to the Subscribers, while safeguarding the legitimate rights, prerogatives and interests of the Participating Physicians.

IMPORTANCE OF THE SERVICE PRINCIPLE

In common with most other Blue Shield Plans, Medical-Surgical Plan has one elementary feature which distinguishes it from all other insurance programs offered by agencies other than the medical profession—namely, the service principle.

This principle involves an agreement between the Plan and the Participating Physician under which the physician has agreed to accept the payment made by the Plan for any services covered by the Contract as his payment in full provided that the income of the Subscriber is within the specified "income limit" for "service benefits". The physicians who pioneered the Blue Shield movement have recognized that the medical profession would not be justified in endorsing or supporting any pre-paid sickness insurance program which offered merely cash indemnity to the Subscriber. Such programs demonstrably fail to meet the public need for inclusive protection—especially for families of moderate and low income. A service benefit program is the only plan that obviates the social need or public demand for universal compulsory health insurance.

Wherever a service benefit program has been offered, the vast majority of physicians have

voluntarily cooperated with the Plan as Participating Physicians. Participation in a service benefit plan affords the physician an opportunity to take a personal part in solving the major social problem confronting the profession. Therefore, a service plan builds a conscious solidarity among physicians in their effort to prove that the profession can meet its traditional responsibility to the public.

Medical-Surgical Plan is proud of the fact that approximately 80 per cent of all eligible physicians in New Jersey are maintaining their voluntary agreement with the Plan as Participating Physicians and are making a contribution to the welfare of the people and the medical profession. The trustees of Medical-Surgical Plan wish each Participating Physician to know that his cooperation is deeply appreciated. Each Participating Physician is a co-worker in this enterprise; he should look upon the Plan as his own enterprise, and we assure him that his advice and constructive suggestions will always be welcomed by the trustees who are responsible for the operation of the Plan.

PHYSICIAN INFORMATION PROGRAM

During the past year the Plan has continued its program of providing information to Participating Physicians. In March 1952, the Plan distributed to all Participating Physicians a loose-leaf "Manual for Participating Physicians" containing, for the first time, a complete compendium of information on the history and organization of the Plan, By-Laws of the Plan, and the statute under which it operates, the Code of Regulations, the Forms and Procedures, and the completely revised Schedule of Payments, which was made effective March 15, 1952.

Since then, a number of new code items have been added and certain changes of relatively minor importance have been made in the General Provisions. The Schedule of Payments has been reprinted, incorporating these changes as approved by the Board of Trustees during the past twelve months, and a copy of the reprinted schedule has recently been sent to all Participating Physicians.

A letter of information on special subjects has been sent occasionally by the medical director to all physicians, and the Plan has also published information regularly on the Medical-Surgical Plan page in this JOURNAL. The Plan is now preparing to issue a regular monthly leaflet of information to all physicians in the State.

The Plan is also giving favorable consideration to the early employment of a field representative, whose function it will be to make regular contact with the various county society advisory committees to the Medical-Surgical Plan; to meet with officers and members of the county societies whenever it may seem desirable; to interview newly enrolled Participating Physicians and to conduct informational programs for groups of secretaries and office nurses of practicing physicians.

The underlying purpose is to enable the Plan to maintain a continuous field information service for physicians and their office personnel, thus enabling them better to understand the necessary requirements of the Plan and, at the same time, to enable the Plan to learn firsthand the problems and requirements of the practicing physicians.

LIAISON WITH THE ORGANIZED PROFESSION

Medical-Surgical Plan maintains an official liaison with the profession on an organized basis at several levels. Briefly, these are:

(1) Permanent Committee on Medical-Surgical Plan

This is a small committee comprising representatives of Medical-Surgical Plan and Hospital Service Plan and the principal officers of The Medical Society of New Jersey. It meets occasionally to consider problems of mutual interest to all three organizations.

(2) Liaison Committee of The Medical Society of New Jersey and Medical-Surgical Plan

This committee, recently established by The Medical Society of New Jersey at the request of the Plan, comprises principal officers of The Medical Society of New Jersey, the chairman of each of the county medical society advisory committees, and representatives of Medical-Surgical Plan. This committee has been set up for joint consideration of questions of broad policy involving medical practice, and any conclusions reached by it would be subject to review by the Boards of Trustees of the State Medical Society and of Medical-Surgical Plan.

(3) Consultative Committees to the Fee Committee of the Board of Trustees of Medical-Surgical Plan

These committees have been appointed by the principal specialty organizations throughout the state for the purpose of conferring with the Plan in regard to Plan payments for specific procedures and the general provisions governing payments.

(4) County Medical Society Advisory Committees

These committees, nominated by the respective county medical societies and appointed by the Board of Trustees of Medical-Surgical Plan in accordance with the Plan's By-Laws, are designed to serve as liaison groups between the Plan and the practitioners in each county. While the county society committees are primarily concerned

with the problems affecting individual practitioners within their counties, the Plan has also consulted the county society committees on more general matters, and each county society committee is represented on the Liaison Committee described in (2) above.

NEW SUBSCRIPTION CONTRACT

During most of the past twelve months, the trustees and staff of Medical-Surgical Plan have been engaged in a study of the many problems involved in the general revision of the Plan's Subscription Contract. These studies have been complicated and prolonged by the uncertain and ever-changing economic conditions of the country as a whole, and by the rapid growth of the Plan's enrollment, which in itself raises certain new problems and exaggerates some of our older problems.

As this report is written, the Board of Trustees is nearing the completion of a tentative outline of principal changes contemplated for a new Subscription Contract. It is hoped that this study may be completed to the point where it can be submitted to the House of Delegates of The Medical Society of New Jersey at its annual meeting in May.

ACKNOWLEDGMENTS

The Trustees of Medical-Surgical Plan take this opportunity to express their appreciation to Hospital Service Plan of New Jersey for the continued cooperation and services of the highest order rendered by Hospital Service Plan under the terms of the Joint Operations Agreement existing between the two Plans. We believe that the profession as a whole will join us in applauding the remarkable achievements of Hospital Service Plan of New Jersey in achieving the impressive increase in enrollment of Medical-Surgical Plan, which was recently celebrated by The Medical Society of New Jersey.

The Trustees of Medical-Surgical Plan also wish to express to the officers and members of The Medical Society of New Jersey and to each Participating Physician their deep appreciation of the continued support and cooperation which have been given so generously in the interest of the people of New Jersey.

SUMMARY OF OPERATIONS

Year Ending December 31	Earned Subscription Income	Claims Incurred	Claims Incurred (% of Income)	Operating Cost (% of Income)	Persons Enrolled End of Period
1942	$ 11,148.78	$ 5,395.50	48.4	51.1	4,131
1943	74,498.47	49,562.50	66.5	23.9	16,015
1944	187,708.74	135,605.75	72.2	18.9	30,427
1945	326,530.37	208,288.36	63.7	17.5	49,441
1946	540,227.83	370,576.10	68.6	16.8	88,088
1947	947,945.57	681,922.85	72.0	17.1	143,700
1948	1,524,814.76	1,203,651.50	79.0	15.0	236,604
1949	2,545,518.33	1,979,542.90	77.8	13.8	353,827
1950	5,252,060.16	4,278,098.89	81.5	12.9	499,882
1951	8,031,305.47	6,527,374.64	81.3	10.9	669,906
1952	10,952,158.56	8,729,257.06	79.6	10.8	997,303

COUNTY SOCIETIES

ATLANTIC

Robison D. Harley, M.D., President, Atlantic City

First, I wish to express my earnest appreciation to the various committees and their chairmen for their excellent work and splendid cooperation.

The Program Committee, ably chairmanned by Dr. Hilton Read, has brought us one of the best series of lectures we have ever had. The speakers and their subjects follow:

September: Dr. Michael Scott, Professor of Neurosurgery, Temple University Medical School: "Head Injuries."

October: Mr. Leo Clark, special agent of the Federal Bureau of Investigation: "Activities of the F.B.I."

November: Dr. Samuel Asper, Assistant Professor of Medicine, Johns Hopkins Medical School: "Hyperthyroidism: Long Term Treatment with Anti-thyroid Drugs".

December: Dr. Harold Zintel, Associate Professor of Surgery, University of Pennsylvania Medical School: "Surgical Treatment of Hypertension".

January: Dr. Andre Cournand, Professor of Medicine, Bellevue Medical School: "Hemodynamic Concept of Cardiac Failure."

February: Mr. L. C. Hooper, investment counsellor and writer on financial subjects: "The Doctor and His Investments".

March: Dr. David Cayer, Assistant Professor of Medicine, Bowman-Gray Medical School: "Differential Diagnosis of Jaundice".

April: Dr. Paul Hoch, Professor of Psychiatry, Columbia Medical School: "Indications for the Selection of Psychiatric Treatments".

I am particularly grateful to Dr. Louis Rosenberg for his able assistance as secretary. Dr. Leonard Erber did an excellent job as reporter. The Board of Censors also did a fine job. Under their direction, we accepted two regular, seven associate and two transfer members.

We regret that Dr. John Holland, our treasurer, has been temporarily borrowed by the Army. Dr. Jay Mishler has accepted the position of treasurer pro-tem. As business manager of the *Bulletin* he is unexcelled and as chairman of the Broadcasting Committee, many fine films were arranged. Dr. Samuel Diskan wins special commendation as editor of the *Bulletin*.

It is reassuring to know that the Emergency Medical Service is working so well. Over 500 emergency medical calls were successfully handled during the past summer season and we may expect a similar number this year.

At the October meeting members of the Atlantic County Dental Society were our guests. Mr. Leo Clark was our speaker. Arrangements have been made to have a similar meeting with our lawyer colleagues next fall.

In an endeavor to stimulate thought on the proposed new hospital program, Mr. Paul Cope arranged an address by Mr. Vincent Kling, hospital architect, and Mr. John Steinle, director of the Veterans Hospital program.

Dr. James Gleason has done a splendid job as chairman of the Insurance Committee and Medical-Surgical Plan Committee. I am also grateful for the assistance of Doctors Saseen, Joy and Weiner in their work on the Telephone Committee which stimulated attendance.

Dr. David B. Allman deserves special citation for the wise guidance and good judgment which he contributes so generously to our society. We are certainly proud of this illustrious member and rejoice each time he receives another high honor.

I wish you to know I am deeply grateful to all of you for the fine way you have cooperated to make this such a pleasant year.

It is with regret that I report the passing of Dr. Myrtile Frank, July 1, 1952 and Dr. Bernard Crane, March 21. Both were fine gentlemen and upheld the finest traditions of medicine.

BERGEN

G. Barton Barlow, M.D., President, Leonia

At the beginning of this year it was stated that the aims of this society would be to carry on the many good works that had been begun previously, to consider some problems that have been facing us, and to correlate our work with that of the State Society. The most distressing problem appeared to be lack of interest within our own society, and the aim of the president at that time was to improve this situation.

In October an entire meeting was devoted to an open business meeting for the society. This proved to be well received and worthwhile from the standpoint of both the administrative officers and the society at large. It seemed to be a definite opening wedge in counteracting the apparent inertia within the society.

Throughout the year our various committees have all done their jobs well. I would like particularly to mention the following accomplishments:

The Pharmaceutical Committee, Dr. Milton Sloane, chairman, has successfully met a number of problems during the year and the committee has worked very harmoniously with the comparable committee of the Bergen County Pharmaceutical Association for the improvement of medical-pharmaceutical relationships throughout the county.

The Public Relations Committee, under the chairmanship of Dr. John Olpp, has continued to press for better public relations, has held a number of meetings with public officials and has worked very diligently in efforts to solve different problems, especially the misunderstanding concerning emergency calls.

The Cardiac Committee, Dr. LeRoy Black, chairman, has finally brought a chapter of the New Jersey Heart Association to Bergen County, something we have been anxious to have for some time.

The Entertainment Committee, under the chairmanship of Dr. Robert Ringewald, arranged an excellent annual dinner which was held in honor of members who had reached the age of 65 years and who, in their total years of service to the county, represent more than 1000 years of medical practice in Bergen County.

A start has been made by our By-Laws Committee, under the chairmanship of Dr. Luther Markley, to revise our By-Laws. This should simplify the business of the county society for future administrations.

The Public Health Committee, Dr. Howard Rosenbauer, chairman, is planning an interesting demonstration in cooperation with the Bergen County Health Fair, which is to be held at the Bergen County Vocational School on May 22 and 23.

During the year a number of special committees were established for particular problems and among these I would like particularly to mention the committee to formulate plans for the medical-dental school, under the chairmanship of Dr. Marshall Driggs; the committee to study and report on the matter of chiropractic, under the chairmanship of Dr. Robert Neville; the special General Practitioners Committee, under the chairmanship of Dr. Robert Verdon; the medical civil defense committee, under the chairmanship of Dr. G. Albin Liva; and special blood bank committee, under the chairmanship of Dr. Reuben Anderson.

We wish again to acknowledge the splendid aid and services rendered by our Executive Secretary, Mrs. David Boyd, whom we are unfortunately losing this year, and the work of Mr. Randall Norris, our Public Relations Counsel, who has been of great help in newspaper coverage and various other public relations activities throughout the county.

BURLINGTON

Arthur B. Peacock, M.D., President, Moorestown

The Burlington County Medical Society has had an excellent scientific program during the past year. Topics as diverse as veterinary medicine, forensic medicine, industrial medicine, blood transfusions, social welfare, gastric surgery, vaginal bleeding, rehabilitation of the paraplegic, poliomyelitis and gamma globulin, resuscitation of the newborn, civilian defense, and diabetes mellitus have been presented and enthusiastically received by a representative segment of our membership.

Our society has tried to improve its public relations. One meeting was held at the Welfare Home as guests of the Burlington County

Welfare Board. An inspection tour of this institution brought to many of us an understanding of how our county is trying to care for its less fortunate citizens. The Burlington County Bar Association joined us in a dinner meeting and we exchanged ideas of mutual interest.

One contribution has been the continuation of the Burlington County Nursing Scholarship. This scholarship offers a three-year scholarship to the most deserving resident of Burlington County who wishes to enter any regularly accredited nurses training school. We realize this is but a small contribution to the need for more nurses, but it does express the willingness of our society to assist in providing a means of encouraging candidates to enter the nursing profession.

We regret to announce the loss of one of our members, Howard M. Hebble of Moorestown. He was an outstanding otolaryngologist and his colleagues will long remember him for his devotion to his work and to the work of our society.

In turning over the gavel to our president-elect, Dr. Freeman W. Metzer, I take this opportunity to thank each and every member of our society who has so generously and unselfishly contributed to the progress made during the year 1952-53.

CAMDEN

Martin H. Collier, M.D., President, Camden

Monthly meetings have been held throughout the year with outstanding scientific programs being presented at each. Attendance has been excellent.

In cooperation with the state society, active committees carried out the programs outlined for Diabetes Detection Week and Better Breakfast Week.

During the year 14 new members were elected and honorary memberships were conferred on Doctors Ernest G. Hummel and Isaac G. Sieber, both of whom have been in practice fifty years. Handsome parchment certificates honoring each for their long years of service were presented.

The Society adopted the resolution approving the fluoridation of public water supplies and a resolution urging member physicians to volunteer to work two days a year on the Red Cross Bloodmobile.

A liaison dinner meeting with the members of the Assembly and the State Senate was held. We feel much good was accomplished by this meeting not only with reference to the Chiropractic Bill but in reaching better mutual understanding concerning any possible future legislation.

The Monthly Bulletin has increased in size and is being mailed to all physicians in the county as well as to several neighboring societies.

CUMBERLAND

Norman Henry, M.D., President, Vineland

At the Cumberland County Medical Society Annual Meeting, we had as guests, Dr. Harrold Murray, president of the state society, Dr. V. P. Butler, vice-president, and Richard Nevin, executive officer. They briefly stated the aims and program of the state society and enjoyed our outdoor meeting at Palatine Lake.

The following months found us absorbing the presentations of well-known clinicians at our regular meetings. Guest speakers included Drs. Temple Fay, V. P. Butler, Anthony De Palma, and a group of physicians from Jeanes Hospital, Philadelphia, whose topics, "Cerebral Palsy", "Medical-Dental School", "Painful Shoulder Syndrome", and "Tumors of the Oral Cavity", respectively, were well received.

The various committee chairmen were most cooperative and deserve tribute for their efforts in bringing to the entire group information from the state society. Our committee on legislation and its chairmen had the sub-

ject of chiropractic licensure before us regularly, in order that individual members could express their opinions both to the lay public and our representatives in the state legislature.

Better Breakfast Week and Diabetes Week were observed in our county mainly through the close cooperation of the newly formed Cumberland County Woman's Auxiliary.

In addition to our regular programs this past year we accepted an invitation to a buffet dinner-dance held at the Cohanzick Country Club, Bridgeton, from the Cumberland County Woman's Auxiliary. This affair was exceptionally colorful and well attended.

In January, 1953, our members were guests of the Cumberland County Pharmaceutical Association. This meeting was the first in which these two organizations met. Mr. Louis Kazin, Rutgers Extension Service Director, spoke of the Harrison Narcotic Act and The Humphrey-Durham Bill. Mention of the "Mortar and Pestle" display of Dr. Charles Butcher of Heislerville, N. J., was highly commended. This collection of rare and ancient metal castings used in doctors' offices and pharmacies dates back for centuries.

The committee on vision and hearing has endeavored to aid by offering its services to the examining school doctors. By contacting the county superintendent of schools and local school boards, they have made it possible for any child to have thorough and complete care.

Inasmuch as Public Relations was a highlight this past year, our Society inaugurated the emergency service program for doctors-on-call, established a cerebral palsy clinic, and cooperated with the American Cancer Society Clinics and American Heart Clinics already established in our county. Recently we have been represented at the newly organized Public Health Program for rural sections of Southern New Jersey.

Drs. Charles Wilson and Herbert Wilson both have been honored by our society and elected to emeritus membership. Their service to our Society has been long and we hold them both in high esteem.

There were six new members during the past year, and we were glad to welcome them to one of the oldest county societies in New Jersey, founded in 1816.

The activities and accomplishments of the Cumberland County Medical Society have been numerous and an expression of thanks must certainly be given to the entire membership and especially to Dr. Mary Bacon, secretary.

ESSEX

NICHOLAS A. ANTONIUS, M.D., President, Newark

The past year has been an active one for the county society and a rewarding one for me. The officers, the Council and the committeemen have all worked together and accomplished much. This year's administration has emphasized a few policies and stressed what we felt to be needed solutions to basic, practical problems that faced organized medicine on the county level.

One of the first items considered was improving the Emergency Medical Service in Essex County. We saw that, in the past, it had been too dependent upon the services of one or two physicians. We urged the whole society to take the responsibility for this public health service. Approximately 190 physicians have now volunteered to be placed on our emergency service list. Our society at this time is working on the problem of getting future associate members to take emergency calls.

We have also taken steps to improve medical education in our county. Three of our hospitals now have instituted courses which include clinical study. The following courses have been instituted this year: Newark City Hospital: surgery; Orange Memorial Hospital; gastro-enterology; and St. Michael's Hospital: cardiology, internal medicine, general practice, and pediatrics. The following two clinical courses are to be started in the fall of 1953; St. Barnabas Hospital: clinical pathology; Beth Israel Hospital; clinical hematology and radioactive isotopes. We have also supported the state society in its endeavor to have a state medical school.

We have held meetings with our local legislators and we have met with representatives of press, radio, and television. We have sent 247 speakers to important lay groups. We have acted as the northern distribution center for the successful state society Better Breakfast Week Program of October 1952.

We have tried to secure the active cooperation of doctors in the plans established for medical care for the indigent and the medically indigent. Doctors were also urged to take initial steps to foster such medical care programs in communities of our county where they do not already exist.

An Orientation Committee has already been appointed to instruct our new members on the advantages of belonging to a medical society and on the obligations which they owe to their fellow physicians and to the community.

We have tried to achieve a closer cooperation with the Essex County Pharmaceutical Association. To this endeavor we have granted them available space in our *Bulletin* so that they may have a chance to bring mutually important matters before our physicians. We intend to hold a regular meeting with this association next year.

One of the many programs before our society this year has been that of coordinating inter-society unity. We have many societies, groups, and medical associations within our county and we have striven toward achieving unity of action on a county-wide basis.

As organized medicine branches out and meets its community responsibilities, the task of a medical society on a local level becomes more important and more complex. We can no longer avoid participating in government, social, and economic agency activities as they serve the public. Mr. Arthur R. Ellenberger, who has been with us as our executive secretary for most of this administration, has done an excellent coordinating job as we have moved out into new fields of administration and social action.

We have sought to better our public relations in every way. We have tried to carry to the doctor the fact that public relations is his own personal responsibility. By facing our responsibilities on local levels we went out to make contact with many lay organizations and to help them with community problems which doctors have tended to neglect in the past.

GLOUCESTER

DON B. WEEMS, M.D., President, Wenonah

The program of the Gloucester County Medical Society had three main goals for the year 1952-1953.

First, better public relations. This was well promoted by Dr. Chester I. Ulmer and his committee, who did so much to give our socity excellent publicity through local and Philadelphia press releases.

Second, to have a good legislative program. Dr. I. N. Patterson, our keyman and his committee have done a magnificent job, not only at county level but also state-wide.

Third, good scientific topics with outstanding speakers. Our program chairman, Dr. Louis K. Collins and his committee have had excellent programs.

All programs were very practical and helpful to our members who asked the speakers many questions. One of the highlights of the year was our social night to which our wives and friends were invited. We entertained as our guests members of the press and also our representatives in state and national government. Guests from the state society were Dr. Henry B. Decker, President-Elect of The Medical Society of New Jersey and Mr. Richard I. Nevin, Executive Officer. The speaker of the evening was Honorable Alexander H. Smith, senior U. S. Senator, who was introduced by Honorable Robert C. Hendrickson, our junior Senator. Senator Smith gave our society and guests a very instructive talk on the foreign policy of the United States.

HUDSON

Harry J. Perlberg, M.D., President, Jersey City

Of the eight monthly meetings regularly scheduled at Murdoch Hall, Jersey City Medical Center, six have taken place to date. The roster of guest speakers on subjects of current medical interest includes Drs. George T. Pack, Abraham Jezer (presented in collaboration with the local chapter of the American Heart Association), Frank E. Adair, Bret Ratner, and Harold Jacox, all of New York City; and Dr. Frank H. Lahey of Boston. Others included Mr. Irving Koenig, C.P.A. and former agent with the Department of Internal Revenue at our March meeting (in time to be of assistance to perenially perplexed members); Mr. Charles W. Broadhurst, defense attorney of Jersey City, on the subject, "Malpractice Claims and How to Avoid Them"; and Mr. Richard I. Nevin, executive officer of the state society. Attendance at all meetings has been gratifying.

A special meeting was held on December 12, 1952, when, through the courtesy of Dr. Kenneth Judy, not only our members, but members of the other component societies of New Jersey and representatives of the medical societies in the metropolitan area of New York, were addressed by Colonel Harold Glattly of the Surgeon General's office in Washington on the timely topic, "Current Problems in Medical Officer Procurement and Pending New Doctor-Draft Legislation."

From November 16 to 22, 1952, the society, through its Diabetes Committee, sponsored its annual Diabetes Detection Drive. As in the past several years, diabetes detection centers were established in all local hospitals for the convenience of the public, without charge. Posters designed to make the public diabetes-conscious were placed in drug-stores, schools, hospitals, and other appropriate places.

Opening the official season and in collaboration with the New Jersey Academy of General Practice, the Society presented an outstanding program of postgraduate lectures in the Medical Center.

We are pleased to make mention in this report that a comprehensive and practical cancer program is in operation in this county as a result of joint planning on the part of the local chapter of the American Cancer Society and our Cancer Committee, several members of which have given their time and ability in addressing lay organizations on various aspects of the cancer problem.

Since our annual meeting last year, the Society has suffered the loss of four honorary members—Dr. David R. Atwell of Hoboken; Dr. Hugo Gille of Jersey City; Dr. James H. Rosecrans of Hoboken, vice-president of the Society in 1908-09 and reporter in 1905-06; and Dr. James W. Timlen of Arlington. Death has also taken six distinguished active members—Dr. John J. Chizik of Bayonne; Dr. Herman N. Cohen of Hoboken; Dr. Arthur P. Hasking of Jersey City, secretary from 1907 to 1910 and president in 1910-11; Dr. Abraham E. Jaffin of Jersey City, president in 1928-29; Dr. Traugott J. Schuck, president in 1935-36; and Dr. Daniel B. Street, president in 1933-34.

Interspersed among the business and professional activities on the agenda of the society this year, we find three social events: 1. The two-day Hobby Show on November 8 and 9, 1952; 2. The supper dance at Mayfair Farms in West Orange on October 29, 1952; 3. Our own annual dinner at the Masonic Club in Jersey City on April 11, 1953.

Since the latter part of 1950 the Society has contributed seventeen members to the armed services. Of this number, six have completed their tour of duty and have returned to civilian practice while eleven are in military service at this time.

HUNTERDON

M. W. Looloian, M.D., President, Whitehouse Station

Regular county medical society meetings were held every other month. On alternate months, programs were presented by Dr. Ray Trussell, administrator of the Hunterdon Medical Center. Attendance at all meetings has been 55 to 60 per cent of our membership which is now 36, with the addition, during the past year, of three of the Medical Center specialist staff and one general practitioner. Two members were lost by death and transfer. Two of our members are not in good standing, having failed to pay their dues.

To date, two Medical Center staff meetings have been held and others are to be held at two to three week intervals in an effort to iron out all the details of running the hospital which will be in operation by July 1, 1953. The organization of a new hospital from the bottom up is an enormous task, and we are all thankful for the job Dr. Trussell has taken upon himself. Without him, or another man of his exceptional attributes, it is unlikely that our hospital could ever have come into existence. Our enthusiasm in this project will be better understood if it is realized that there has never been a hospital in this county of about 440 square miles and a population of 42,686. With the exception of one physician, all of us must travel ten to twenty miles to the nearest hospital.

All members have been most cooperative in the various committees and in attending outside meetings when requested. Our society, being small, has always been in the nature of a happy family and it is hoped it will so continue.

MERCER

John F. Kustrup, M.D., President, Trenton

Because of the great interest in public health and the public welfare of our county, the Mercer County Medical Society attempted this year to present a program that would make the citizens of Mercer County health conscious, and, at the same time, improve public relations between the doctor and the community. This was accomplished on a larger scale than we anticipated, largely through the unselfish work of the committees in every field, and by encouraging the Woman's Auxiliary to take an active part in our affairs.

It is not amiss at this time to give credit to the fine cooperation that we have received from both press and radio, without whose assistance our accomplishments would have been limited.

Public Relations Program

The Public Relations Committee began its work on June 17, 1952, at which time it planned a dinner-meeting to be held on July 8 at the Trenton Country Club, the society acting as host to representatives of press and radio. Differences of opinion were "ironed out" in a friendly fashion, and at the conclusion of the meeting, we of the medical profession had a better concept of the approach of press and radio to public health, and, in turn, the press and radio group understood our problems more clearly. The attitude taken by our group at this meeting was to inform the members of the press and radio of our limited knowledge of public relations, and we lost no time enlisting their help as experts in this field. The press, in turn, learned of our desire to always place the welfare of the patient above all else as far as the doctor is concerned.

The sequel to this meeting was one in which the Woman's Auxiliary Public Relations and Public Health groups were called upon to contribute a "lion's share" of work in accomplishing our purpose.

With the cooperation of Mrs. Nan Rednor, known to radio listeners as "Nan About Town", we were able to arrange, through the facilities of station WBUD, a series of broadcasts on public health topics, under a program entitled "Help Yourself to Health", which went on the air every Monday evening at 7:30. On this program, we had two members of the Mercer County Medical Society, one member of the Woman's Auxiliary, and a guest. The guest was either another doctor not associated with the Mercer Society, or a layman, who was an expert on the subject to be discussed.

The following are the subjects presented through this medium during the year 1952-1953:

Diabetes detection and control; arthritis; heart disease; tuberculosis detection and control; safety; obesity and malnutrition; first cancer program; alchoholism, causes and cures; home nursing; state medical center and school (Dr. Murray, President of The Medical Society of New Jersey was the speaker on this program); save your sight; dental health; child welfare; mental hygiene and health; rheumatic heart disease; public health; state hospital; New Jersey neuropsychiatric institute; stomach ulcers; allergies.

Other subjects to be presented are:

Cancer; maternal welfare; the importance of understanding your child during his formative years; menopause; conservation of hearing; the hospital, the doctor and you; polio; new wonder drugs.

In addition, the chairman of the panel wrote an article for the *Trenton Times* and the assistant to the chairman wrote an article for *The Trentonian*.

The end result of this approach to public health was the ability to reach many thousands more people than we were ever able to approach through Public Health Week which was recommended as the proper approach by The Medical Society of New Jersey. Incidentally, there was no financial outlay whatsoever by the county society. The newspapers and radio are particularly pleased with the response made by their subscribers and listeners to these efforts.

At the beginning of this project, difficulty was experienced in persuading doctors to take part in the panels. However, as the program began to "snowball", any number of volunteers were obtained for each panel.

Another item of interest is a program which was initiated by our Woman's Auxiliary in cooperation with the County Medical Society and the Mercer County Safety Council in Industry. Beginning on April 2, and continuing for four successive Thursdays, subjects relative to disease and its effect upon industry will be discussed at the Adath Israel Auditorium in Trenton. At these meetings, outstanding authorities in the fields of cancer, heart disease and alcoholism will appear as featured speakers.

To our knowledge, this is the first time that industry and a medical society have joined forces in an endeavor to present such a program to a community. This teamwork brings about a closer relationship between the physician, industry, and the community. Already the program is being watched with interest by the large industrial tycoons of the nation, and should it be successful, industry has expressed a desire to enlist the cooperation of other county societies throughout the entire nation.

The Woman's Auxiliary has been encouraged to foster a public health program, as recommended by the state Woman's Auxiliary, in the rural communities. Members of the Mercer County Medical Society have volunteered their time in order to make the undertaking a success.

Flouridation of Water

Although the Commissioners of the City of Trenton deferred action on the fluoridation of the city's water supply, our Committee on Fluoridation has been active, and is doing its part in trying to improve this phase of public health.

Medical Testimony and Compensation Committee

The Medical Testimony and Compensation Committee, after consultation with Mr. Charles L. Levine, Deputy Attorney General; Chief, Claims Bureau, New Jersey Department of Law and Public Safety, clarified the policy of the State of New Jersey with respect to its schedule of fees to the physician treating any of its compensable cases. With regard to these fees, a request was made that a letter be sent to the Board of Trustees of The Medical Society of New Jersey stating that the Mercer County Medical Society does not concur with the reduced fees that have recently been established by the Medical-Surgical Plan, and recommends a return to the old schedule of fees, restoring the level of fees to the same as that which existed before the reduction was made.

It was felt that the Medical-Surgical Plan was first instituted to care for catastrophic illness among patients of low income, and since the State of New Jersey does not qualify as such a group, it is not entitled to the fees set forth by the Medical-Surgical Plan which they have used as a guide.

General Practice Committee

Through the efforts of the General Practice Committee and the publicity department of the Public Relations Committee, the program recommended by the previous administration, under Dr. F. K. Engelhart, was enlarged. In addition to following the suggestions offered by the previous administration, the Secretary-Reporter was instructed to supply literature to the "Welcome Wagon" for distribution to newcomers to this area, informing them of a

procedure to be followed in securing the services of a physician. Other pertinent information as to emergency medical service was also contained in the literature supplied the newcomers.

General

Minor changes in the constitution and by-laws are being adopted to facilitate a better approach to the admission of new members. These changes follow the suggestions outlined by The Medical Society of New Jersey.

Our Society's Council recommended that a meeting room be reserved for our delegates and alternates at future State Society annual meetings. This recommendation was approved by the society, and will be carried out.

Mr. Richard I. Nevin, executive officer, was the guest speaker at our annual meeting held at the Trenton Country Club on November 13, 1952. An innovation at our annual meeting and banquet was the inclusion of the Hon. Donal J. Connolly, Mayor of Trenton; members of the allied professions; and the largest representation from press and radio that we have had up to this time.

A highly successful campaign was carried on during "Better Breakfast Week" and "Diabetes Detection Week" in which members of the society who were particularly interested in the fields of nutrition and metabolism put forth their finest efforts to educate the citizens of our community as to the need of proper nutrition and diabetic control.

The Committee for the Control of Tuberculosis outlined a program for better control of tuberculosis. The recommendations offered, and approved, were as follows:

1. Whereas a survey of people on the street with the usual tuberculosis survey truck or from people in industry does not yield a high percentage of positive cases of early or unsuspected tuberculosis, and whereas patients coming routinely to a doctor's office are felt to have a higher incidence rate, it was resolved that doctors be urged to encourage their patients to have chest x-rays taken routinely. Some doctors do this in the ordinary course of events so that the municipal unit in Trenton finds that a very high percentage of their patients comes from two or three doctors. Survey films to be taken at one of the hospitals or other facilities can be done at a cost to the patient of under $5.00. The patient must be advised at the time that this recommendation to them is made that the film is only a survey film and that should any suspicion of trouble arise it should be confirmed by a larger film.
2. Whereas the incidence of tuberculosis found in routine x-raying of the chests of all hospital admissions has been found to be much higher than that found in the non-hospital or non-office type of survey, it is recommended that all hospitals in Mercer County be urged to adopt the practice of routine chest x-raying of hospital admissions. There are certain exceptions to this: children without a known positive Mantoux test and those with recent x-rays may be omitted. Such routine survey filming is already the practice in one hospital within the county. It is recommended that the Inter-Hospital Committee be called to meet and consider this question.
3. Whereas certain patients known to have chronic contagious tuberculosis are sometimes problems in regard to their control and are in the habit of going out in their communities against advice, thereby spreading the disease, it is recommended that court procedures or quarantines instituted through the Department of Health be used to restrain these patients; specifically the possibility of having a tuberculosis ward at the work house to which they could be remanded by court order is to be explored.
4. A campaign to survey workers in small factories and stores and other types of concerns is urged. There have been numerous large surveys, but the reaching of small units has never been attempted in Mercer County.
5. The difficulty of detecting the unexpected cases in areas in which tuberculosis has a high epidemic rate has been a recurrent problem. When the survey unit comes around it is difficult to persuade people to go into the survey truck. Better timing as to weather will help in this respect. It is felt that an intensive effort on a block by block or house to house basis will have to be instituted. For this it is recommended that a joint effort by various interested civic agencies be organized and conducted intensively so that individuals are signed up to have the x-ray taken before the arrival of the truck itself.

At our February, 1953 meeting, the following resolution was adopted with respect to the recall of members of the Society to active duty in the Navy, and with reference to recruitment of physicians for the armed services:

WHEREAS, the Mercer County Component Medical Society takes note of the recall of several members of the society to active duty by the Department of the Navy, and

WHEREAS, there are a number of eligible physicians in Mercer County who have not yet had the opportunity to serve their country; be it RESOLVED, that the Mercer County Component Medical Society is:

1. Unalterably opposed to the recall of Reserve Officers when the country is not at war.
2. The Department of the Navy be requested to increase its reserve component by recruitment training of non-veteran physicians of whatever priority.

3. A copy of this resolution be sent to the Board of Trustees of The Medical Society of New Jersey, Senator H. Alexander Smith, Senator Robert Hendrickson, Congressman Charles R. Howell, the Medical Personnel Director of the United States Navy, and the Chairman of the Armed Services Committee.

The members of the Mercer County Medical Society were guests at a dinner given by the Mercer County Pharmaceutical Association, held March 5, at the Stacy-Trent Hotel, Trenton. The guest speaker was Dr. George Allen Bennett, Dean of Jefferson Medical College, and the toastmaster was Dr. Roy A. Bowers, Dean of Rutgers College of Pharmacy. This is a biennial affair at which the societies alternately play host to each other.

During the year, our Program Committee presented the following speakers:

"Functional Aspects of Heart Disease," Dr. Edward Weiss, Professor of Clinical Medicine, Temple University School of Medicine, Philadelphia.

"New Drugs and New Trends in the Treatment of Tuberculosis," Dr. Harold L. Israel, Graduate Hospital, University of Pennsylvania.

"Genital Cancer in Women—Office Diagnosis and Procedure," Dr. Clarence Briscoe, Benjamin Franklin Clinic, Philadelphia.

"Newer Methods of Treatment of Cancer of the Urinary Bladder," Dr. Charles A. W. Uhle, Professor of Urology, Graduate School of Medicine, University of Pennsylvania.,

"Gastric Cancer and Gastric Ulcer," Dr. I. S. Ravdin—John Rhea Barton Professor of Surgery, University of Pennsylvania.

"Gastric Hemorrhage," Dr. Frederick Henry Amendola, Presbyterian Hospital, New York City.

"Brachial Plexus Pain, Herniated Cervical Disc —A New Method of Traction Therapy," Dr. Bernard Judovich, Graduate Hospital, University of Pennsylvania.

Thirteen new members have been taken into our Society during the past year. Eleven of our members are serving with the armed forces.

Dr. Ellen C. Potter was elected to life membership.

Six members have resigned because of change in place of practice and residence.

Four members have been dropped from membership because of non-payment of dues.

Three of our members have passed away during the year; Dr. Harold C. Cox, died February 13, 1953; Dr. Royden W. Davison (emeritus member), September 9, 1952; Dr. John H. McCullough (emeritus member), July 26, 1952.

Recommendations

The Mercer County Component Medical Society offers the following specific recommendations:

1. Our society does not concur with the reduced fees that have recently been established by the Medical-Surgical Plan of New Jersey, and recommends a return to the old schedule of fees, restoring them to the level which existed before the reduction was made.
2. That the Medical-Surgical Plan of New Jersey be requested to have as its income limit $5,000, but to include the joint income of husband and wife, rather than the individual income of the assured, as a basis on which the patient is eligible for New Jersey Medical-Surgical Plan rates of payments to physicians.

MIDDLESEX

Carlyle Morris, M.D., President, Metuchen

The following list enumerates the guest speakers at the regular monthly meetings of the Middlesex County Medical Society.

October, 1952—"Management of Premalignant and Malignant Lesions of the Large Intestines", Richard B. Cattell, M.D., Surgeon at New England Baptist Hospital and Lahey Clinic.

November, 1952—Business meeting. Slate of officers presented by Nominating Committee.

December, 1952—Harry Hershfield, Humorist.

January—"Life Stress and Bodily Disease", William J. Grace, M.D., Assistant Professor of Medicine, Cornell University.

February—"Pediatric Allergy", Brett Ratner, M.D., Professor of Clinical Pediatrics and Associate Professor of Immunology, New York Medical College.

March—"Medicine Treats the Alcoholic", Henry T. Tesch, New Jersey State Department of Health; A. Thomas McGuire, M.D., New Castle, Delaware; and C. Nelson Davis, M.D., Medical Director, Malvern Institute, Malvern, Pennsylvania.

April—"The Role of the General Practitioner in the Overall Management of Minimal Tuberculosis", Francis J. Lovelock, M.D., Chief of Chest Service, Veterans Administration Hospital, Bronx, N. Y.

May—"Recent Advances in the Treatment of

Cancer", George T. Pack, M.D., Attending Surgeon, Memorial Hospital, New York City.

June—Joint meeting with Middlesex County Dental Society. Forsgate Country Club. Speaker: Honorable Harold G. Hoffman.

In December our annual dinner meeting was held at The Pines, Metuchen, at which new officers were elected and installed.

MONMOUTH

Anthony J. DeVita, M.D., President, Port Monmouth

During the past year, the Monmouth County Medical Society has earnestly endeavored to inspire better public relations by instilling a spirit of individual effort into each of its members toward this end. In every phase of the society's programs, encouragement has been furnished every member to participate as an officer, committee member, or attend our business meetings at our regular monthly executive sessions. This has succeeded in stimulating more interest as well as familiarizing many more members with problems of medical public relations.

Our membership has increased from 230 to 246 in the past year, including all classifications of membership.

Since the Korean incident, eleven of our members have entered military service and four of these members who served have already returned to active practice.

Program

Scientific programs presented at the regular monthly meetings of our Society dealt with the following topics: "Repair of Extra-Cellular Fluid in Diabetic Acidosis", "Management of the Intractable Cardiac", "Relief of Pain", "Management of Craniocerebral Trauma", "Practical Approach to the Problem of Infertility in Females", and "Practical Approach to the Problem of Infertility in Males".

In addition to the foregoing, our Program Committee has arranged a scientific session devoted to a subject on mental health for the May meeting which is scheduled each year at the New Jersey State Hospital, Marlboro.

Again, as is our annual custom, one of our regular meetings was held at Fort Monmouth, where members of the Society were the guests of the medical staff at the Station Hospital.

The annual outing and the annual winter and summer dinner dances were unusually well attended. Much of the credit for the success of the latter two affairs belongs to our Woman's Auxiliary. Their record of enthusiastic cooperation in furthering the various projects of the Society is highly commendable.

Public Relations

Our Public Relations Committee has made every effort to maintain a program of mutual cooperation between the society and newspapers and has advised the editors of the willingness of this committee to serve as a clearing house for information pertaining to medical news releases. Several radio programs have been presented over the local radio station and arrangements were made for the showing of the American Medical Association film "Your Doctor" in local theaters.

The program of "round-the-clock" emergency medical service, inaugurated during 1948, continues to function efficiently in providing the services of physicians when a doctor cannot be reached through the usual channels.

Throughout the year, the Public Relations Committee cooperated with our Legislative Committee in obtaining community support for our position as regards pertinent legislation.

A large number of physicians, dentists and pharmacists turned out for the third annual dinner meeting sponsored jointly by the three societies. This annual affair provides the opportunity for members of the three professions to get together and talk over mutual problems.

Blood Procurement

The two major aspects of the blood procurement program—blood donors to meet civilian needs and assistance to the Red Cross in its program of blood procurement for the armed forces—have been efficiently handled by our Blood Bank Committee. This committee has devoted considerable time and effort toward organizing local units of volunteer blood donors to contribute blood for civilian needs in the local communities. A member of the Blood Bank Committee serves as liaison officer to the County Chapter of the Red Cross and assigns our membership to assist at the various appearances of the Red Cross Bloodmobile throughout the county.

Public Health

The Public Health Committee has continued its excellent record of cooperation and liaison with the official, semi-official and voluntary agencies in this field. Members of the respective subcommittees serve as medical advisers to the agencies and, in addition, take an active part in formulating policy and carrying out the programs of these public health organizations. A few examples are outlined in the following:

We assisted our County Health Council in its capacity as host for the Central Regional Meeting of the Council for Local Health Services at Allentown last October and likewise, in planning an "Institute on Epilepsy" in April at the Monmouth Memorial Hospital.

Our Cancer Control Committee was very active during the year in assisting in the conduct of the service and educational programs of the County Chapter of the American Cancer Society. In addition, this committee cooperated with the State Society Cancer Control Committee in arranging for a "Symposium on the Early Diagnosis of Cancer" scheduled for Monmouth Memorial Hospital during April.

In like manner, our Committee on Cardiovascular Disease developed medical projects for the County Heart Association and assisted in arranging for bi-monthly conferences on cardiac problems.

The Crippled Children Committee worked in close harmony with the County Chapter of the National Foundation for Infantile Paralysis in rendering service to those affected by poliomyelitis.

The major efforts of our School Physicians Committee have been directed toward furthering the "Ten-Point School Health Program" of the Monmouth County Better School Health Council. Each school physician in the county has been asked to request the cooperation of his local board of education and Parent-Teachers Association to this end.

Care of the Chronically Ill

A report of the Committee on the Care of the Chronically Ill notes that negotiations now in progress may result in providing 25 or 30 more beds for chronic cases in one of our hospitals. In addition, the committee calls attention to the expansion of the program for home nursing care in Monmouth County.

Advisory Committee to Selective Service

During the year, our Advisory Committee to Selective Service has rendered personal service to our membership as regards information, review of the individual member's status, etc. This committee is pleased to report that adequate medical service in the hospitals and the communities has been maintained despite a large number of our members having been called into military service.

Physicians Placement

From time to time we have been requested by residents of several communities in the county to assist in arranging for the placement of physicians in their respective communities. We have in turn forwarded these requests to the Physicians Placement Committee of the state society through one of our members who serves on this committee. Subsequently, new physicians have established practice in these areas and we like to feel that the Physicians Placement Committee is responsible in some degree for this result.

Better Breakfast Week

In accordance with the recommendation of the State Society, a local committee was appointed to observe "Better Breakfast Week." A thirty-minute program on the subject of nutrition was presented over our local radio station, news releases and mayors' proclamations were published in newspapers, and literature and posters were distributed in schools and physicians' offices throughout the county.

Conclusion

In closing, mention has been made of only a few committee activities by reason of lack of space. However, many more members have contributed valuable and loyal services. A special tribute must be paid to our Executive Committee who have served most efficiently and expertly throughout the year.

The Monmouth County Medical Society has one recommendation: That a coordinated statewide plan for medical civil defense be formulated to supplement existing local and isolated organizations.

PASSAIC

Joseph M. Keating, M.D., President, Passaic

Our present administrative year was formally launched at the First Annual Installation Dinner held in September at the Alexander Hamilton Hotel. This was a highly successful affair.

In August, plans were made to conduct a weekly radio series entitled "Know Your Doctor" over Station WPAT in Paterson. This program began in October and will continue through May with a different member of the society as speaker each week. This undertaking has evoked an enthusiastic response from the radio audience and, aside from the medical subjects presented, has served as an excellent medium for acquainting the public with the services of the Passaic County Medical Society. It is an excellent public relations project. In addition to the regular monthly meetings of the society held on the third Tuesday of each month, there was one special meeting called during the year. This was held in January and was concerned with doctor draft legislation. This meeting brought forth the largest crowd of the year and certainly the most vocal. The result was the unanimous adoption of a set of resolutions setting forth the viewpoint of the society in this matter. Copies of this resolution were distributed on a nationwide basis. Replies from the Department of Defense, our Senators and congressmen supported our position. Many other county medical societies throughout the country forwarded to us copies of similar resolutions adopted subsequent to their receipt of our proposals.

In addition to the regular monthly meetings of the Welfare Council held on the third Monday of each month, four special meetings were held. The first, held in June, was concerned with plans and organization for the ensuing administrative year. The second (October) was a joint meeting with the Executive Board of the Woman's Auxiliary to discuss mutual projects. The third, held in February, was to discuss with Mr. Joseph Greene, County Adjuster, reorganization plans for the medical staff of Hope Dell. The fourth, held in April, was to discuss the need and procurement of an executive officer for the society.

During the past year, the County Society By-Laws were changed to conform with the State Society's By-Laws concerning emeritus membership.

The past year also saw inaugurated a policy of education of new members, by the Board of Censors, in medical society activities, the advantages of membership and emphasis on medical ethics.

There have been six active sections holding regular meetings in the Medical Society Building, namely: internal medicine, obstetrics and gynecology, orthopedics, pediatrics, surgery and recently, the eye, ear, nose, throat group. Post-graduate courses in cardiology and office proctology are planned for next fall.

The committees have been very active, have met regularly, have initiated many new projects and have made many recommendations to the Welfare Council. In August six new committees were appointed: anesthesiology, general practice, industrial medicine, nursing, radiology and the Medical-Dental School Committee. Reports of these committees appear elsewhere. The General Practice Committee, concerned as it is with the majority of our membership, promises to be one of the most important and active committees in our Society.

On Sunday, January 4, the newly appointed Medical Ethics Committee, with Drs. Leon DeYoe and Norman Dingman as co-chairmen, held its first meeting and has met thereafter on the first Sunday of each month. This Committee was appointed to consider the problems of unnecessary and ghost surgery, fee splitting and excessive fees. Much has been accomplished by the frank discussion and exposition of these vexatious problems. The Committee is exploring with the hospitals in the county the feasibility of adopting standard minimal requirements for Tissue and Audit Committees to control unnecessary surgery. The Committee recommended to the Welfare Council that the membership of the society be polled as to opinions concerning a County Fee List. This survey was accomplished. Replies were received from 203 members, of which 168 expressed themselves in favor of such a list. A Subcommittee of the Medical Ethics Committee is at this time considering further action and recommendations on this subject.

In January a committee to study the problems of alcoholism was appointed, with Dr. George Dren as chairman. This Committee has held several meetings and will submit a report and recommendations to the Welfare Council at its April meeting.

The Program Committee, under the chairmanship of Dr. Sandor A. Levinsohn, has accomplished an outstanding job. Joint meet-

ings have been held with the Dental Society and the Pharmaceutical Association. While not an official joint meeting, members of the Bar Association were invited to our January meeting, which was concerned with the problems of alcoholism. In April the Bergen County Medical Society was our guest in a joint meeting which will initiate an annual home-and-home series of meetings with our colleagues from the neighboring county.

The Grievance Committee, with Dr. Fred Vosburgh as Chairman, has been very diligent, has held many hearings and has adjudicated many difficult problems. The importance of this committee as an instrument of good public relations cannot be overemphasized. To be effective, the public must be made aware of its existence and purpose. It has been publicized through our "Know Your Doctor" radio program and through the newspapers, but this has been limited and how to keep it consistently before the public without exaggerating its need is a thorny problem.

The Legislative Committee, under the chairmanship of Dr. Leopold Thron, has presented a new approach to legislative problems. Direct contact with the legislators from Passaic County was accomplished through a dinner meeting. The Legislative Committee has digested and analyzed important bills and has presented them to our membership for study and action.

As the Medical Society Building is now an accepted fact and rather taken for granted, insufficient thought is given to the men who keep it running and who are responsible for maintenance not only to the society, but also to the tenants in the building, viz: The Cancer Society and the Medical-Dental Service Bureau. The Building Committee, under the chairmanship of Dr. Francis Ash, deserves the gratitude of the membership and certainly that of this outgoing president.

With the acquisition of its own building and collection of building assessment funds, the increase in dues, the collection of state and national dues, and the increase in hospitalization funds, the society's finances have become suddenly big business. For the successful management of its financial affairs an accolade is due Dr. Theodore K. Graham.

The Public Health Committee, with Dr. Floyd Fortuin as chairman, is at present cooperating with the Junior Chamber of Commerce of Paterson in sponsoring a Health Week Open Clinic the latter part of May. This activity is another instance of good public relations work.

The *Bulletin* has continued to improve and expand with Dr. Ianacone in his first year as Editor and Mr. Randall Norris as business manager.

It has been gratifying to watch the development of the Passaic County Health Council with Dr. J. Allen Yager as president, to a force in the community which demands increasingly greater respect and recognition. This Council was sponsored by the Passaic County Medical Society during the past administration of Dr. Levinsohn, and the Society has continued its active interest and support.

The Society was singularly honored in receiving from the American Heritage Foundation an award for having the best record of any county medical society in the country in getting its membership out to register and vote. To the Woman's Auxiliary goes the credit for this outstanding achievement in good citizenship. The Woman's Auxiliary, under the tireless presidency of Mrs. Marion Rauschenbach, has done an excellent job during the past year.

The total membership of the Society as of this date is 543. Of this number there are 475 active paid members, twenty-three emeritus members, sixteen associate members, five members in residencies, seventeen in military service and seven courtesy members.

SALEM

John S. Madara, M.D., President, Salem

The Salem County Medical Society has met monthly since September. It has added to its rolls five new members: Dr. Norton, Woodstown, Dr. Nitsche, Monroeville, Dr. Mark, Pennsgrove, Dr. Libien and Dr. Pashuck, Salem.

The sudden death of Dr. Maurice Chesler on September 12, 1952 deprived the society of the services of one of its most active members.

Dr. Wald transferred to the Boxar County Medical Society in Texas.

The scientific program covered the following topics: phychogenic neurologic motor disorders, missionary medicine, neoplasms of

interest to the general practitioner, evaluation of patients for cardiac surgery, surgical treatment of gangrenous extremities, immunization procedures, diagnostic problems of pulmonary and mediastinal tumors, and the narcotic problem.

A Sunday emergency service is now in effect in the three large towns of Salem County; Woodstown, Pennsgrove and Salem.

The society has organized a group of physicians to give free pre-school immunizations to needy children at the Child Welfare Center in Salem.

The Nutrition Committee of the Society started "Better Breakfast Week" on October 19, 1952 with a breakfast at the Salem Country Club for the local editors and school principals.

The society sent a check to the Salem County Health Council to help defray its expenses.

Action was taken to help defeat Chiropractic Bill S-202. The society also adopted resolutions concerning fluoridation of water, splitting of fees, and the doctor-draft law.

The society is co-sponsoring with the New Castle County Society of Wilmington, a radio series on "Medicine U.S.A.".

The annual shad dinner is to be held on May 16 at the Salem Country Club.

The Woman's Auxiliary is sponsoring a dance for the society on Saturday evening, June 13 at 9 p.m.

UNION

Emanuel M. Satulsky, M.D., President, Elizabeth

It was with a sense of deep responsibility that I assumed the office of president of this society one year ago. At the onset of this report, I wish to express my sincere thanks to my fellow officers and the members of the Executive Committee for their faithful and diligent efforts during this year. This has been a year of decision, and the valuable advice and counsel of these men and the chairmen of the various committees have aided greatly in carrying out the work and responsibilities of my office.

This has been one of the most active years in the long history of this society. In the expansions and improvements that have taken place a myriad of factors have played important roles. Outstanding among these is the unselfish work of a few members who have given so selflessly of their time, energies and efforts. I must call your attention to a comprehensive report of the New York State Medical Society which has emphasized the indifference of many members of the medical profession to constructive cooperative efforts to improve the position of the county medical society as a force in the community. I agree with the conclusion that to other groups and the man on the street the county society speaks for the doctor. If it is disorganized and inefficient, its voice will be weak and ineffective.

At the annual meeting of The Medical Society of New Jersey in 1952 we inaugurated the establishment of an official headquarters for the delegates of this society and other members who were attending the meeting. It facilitated the handling of all necessary business and established a closer social contact between many of our members and their wives. It is my recommendation that this practice of having a central meeting place at the annual meeting be continued.

We have established and maintained a close liaison between this society and our legislators and we are grateful to them for their continued support and interest. This year has been particularly active for our Legislative Committee and keymen because of the renewed threat of a chiropractic bill to be introduced before our legislature. At this writing, our representatives are fully aware of our opposition to S-202 and to the fact that we will not oppose A-456 if this bill is introduced.

We have had a close relationship with the Union County Bar Association and the Union County Pharmaceutical Association and have had a joint meeting with each of them. Their members have also been invited to attend other meetings when our program considered matters which were of common interest. Under the chairmanship of Dr. Samuel Hoch, our advisory committee to the Union County Pharmaceutical Association has made efforts to discuss mutual problems and recommend methods by which the physician and pharmacist may work in better harmony for the benefit of the patient. With the increased number of litigation cases expected by the Supreme Court of New Jersey as a result of new automobile liability laws, it will become increasingly important to consider and re-evaluate our part and our responsibilities in medico-legal testimony to facilitate the work of the courts

and to maintain a proper regard for the important role of the physician in the courts. I recommend therefore that an advisory committee to the Union County Bar Association be set up to reach an amicable understanding of such medico-legal problems that may arise so that the administration of justice will be facilitated.

The Program Committee headed by Dr. Kenneth Day has consistently presented programs which have been a credit to them and to this society. They have been of the highest caliber designed to be of general interest to all the members and to increase the attendance at the meetings. The March meeting to which our wives were invited was an innovation and an outstanding success.

The several advisory committees to various health and welfare organizations had meetings throughout the year with excellent results which have been of mutual benefit and which have been an integral part of our public relations efforts. I must mention the excellent work of the Nutrition Committee, under chairmanship of Dr. E. H. Pogue, during Better Breakfast Week. The Compensation Committee, headed by Dr. Joseph Lepree, has had many meetings regarding compensation fees and in its function as a grievance committee for the problems which have arisen during the year between our members and insurance companies. We are attempting a present to arrange a meeting with a group of claim managers representing various insurance groups to clarify further our mutual positions in the field of compensation work. The work of this committee has been outstanding.

Mention must be made of the successful outing held at the Martinsville Inn. The attendance was the largest in years and the activities of the day, including the food and the warm spirit of comradeship which prevailed were a deserved tribute to the hard work and efforts of the committee headed by Dr. Joseph Sadoff and Dr. E. G. Bourns. At this outing we entertained our legislators and leading newspaper editors of the county. It is fitting at this time to express our thanks to the various hospitals of the county who contributed the money for the purchase of door prizes.

The Speakers Bureau Committee has been very active and we have furnished many speakers on a number of medical subjects. The Public Relations and Emergency Medical Service Committees have met to work on the continuing problem of emergency calls. Drs. Hanson and McCallion have been tireless in their efforts to establish an educational program among the members of this society relative to this problem and they are now soliciting help and advice from local medical societies throughout the county with the aim of establishing local doctor panels to care properly for local calls in each community.

We are justifiably proud of our Woman's Auxiliary this year. Its membership has now risen to 202 members and its work has been outstanding. The interest displayed in the problems of organized medicine has been evidenced by the willingness of this group to help us at all times and by the outstanding meeting which was held on the proposed medical-dental school. The Auxiliary has established a Homemakers Service, the second one in this state, which is already rendering valuable assistance to those requiring such services. Its endorsement and cooperation in all our programs is gratefully acknowledged.

The presentation of the plaques to our past-presidents is one of our outstanding achievements this year. We are all proud to salute these fine men who have given so freely of their time and efforts for the benefit of the Union County Medical Society. Many of our past-presidents are no longer with us but we shall always remember their services and efforts on our behalf. I must particularly mention at this time the name of Dr. Norman W. Burritt, our immediate past-president, who died in 1952. The memory of his honesty and devotion to all that we stand for will long be remembered by us.

We complete this year with 485 active members, 22 in military service, nine serving residencies and 11 emeritus members. You will note our new requirement of having each new applicant present introduced by one of his sponsors and asking for his presence at the meeting when he is elected to membership to sign the constitution. Our increased activities have necessitated the engagement of an assistant to the executive secretary.

This Society has reached a size and stature to consider the acquisition of suitable quarters for our expanding needs. It needs a home of its own to include a larger meeting place, more adequate facilities for carrying on its business, and perhaps a physical set-up which might permit the renting of space to interested allied groups. Such a program was recently adopted in Passaic County to the credit of that society. It is my recommendation that proposals for such a move be considered and adopted with the formation of a representative committee to study this problem from every angle and to secure all necessary financial and business advice for such a project.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Office Management of Ocular Diseases. By William F. Hughes, Jr., M.D., Professor of Ophthalmology, University of Illinois College of Medicine, Pp. 452. Chicago, The Year Book Publishers, Inc., 1953. ($9.00)

In this excellent text, the author has achieved the highly desirable aim of producing an efficient and up-to-date reference book on ophthalmic therapy for the practicing ophthalmologist. It is surprising how much valuable material is included in a comparatively small space. Practically every condition met with in office practice is dealt with, providing a rationale of therapy and a check list of procedures for each one. It is not necessary to wade through pages of print to obtain a few grains of wisdom and advice. There are very few questions which plague the eye physician, in an ever changing therapeutic scene, which are not adequately answered.

The chapters are divided into the headings of Vision, Refraction, Lids, Orbit, Disorders of Ocular Motility, Conjunctiva, Cornea, Sclera, Glaucoma, Intraocular Inflammation, Lens and Vitreous, Conditions of the Ocular Fundus, Neuro-Ophthalmology, Ocular Injuries, Radiation Treatment, and Ophthalmic Formulary. No subject is treated in a vague or disorganized manner. A good discussion of practical optics and refraction is provided. Advice on treatment of disorders of ocular motility is given in easy outline form. Tables of differential diagnosis are generously provided. Chemical burns and radiation therapy, which have been subjects of special interest to the author, are well presented. The ophthalmic formulary, which closes the book, is complete and up-to-date.

This book is a worthy successor and adjunct to the late Dr. Selinger's "Office Treatment of the Eye." Excellent as this latter book was when it first appeared in 1947, so much new therapeutic material has been added in the past six years, that the acquisition of Dr. Hughes' book can be enthusiastically recommended to all practitioners specializing in ophthalmology.

JONATHAN L. HARRIS, M.D.

Infectious Mononucleosis. By Sidney Leibowitz, M.D., Associate Physician, Beth Israel Hospital (N.Y.C.). Pp. 163. New York, Grune and Stratton, 1953. (Modern Medical Monographs) ($4.75)

The existence of an already extensive literature on infectious mononucleosis might imply that even a very critical appraisal of another series of cases had reached an area of diminishing returns. The fallacy of such a conclusion will be evident to anyone who chooses to pursue Dr. Leibowitz's survey of the clinical, hematologic, and serologic features of his own series of 25 cases. Although comparative and relevant material from the general literature is necessarily introduced, the author pointedly refrains from repeating data already well documented.

Good judgment is noted in the selection of a few special and oft-neglected topics for very adequate discussion, namely cardiac and neurologic involvement in this disease, as well as the nonspecificity of the "atypical lymphocyte". Numerous practical aspects of testing for heterophile antibodies are treated well, yet not at too great length.

Not of least importance to those interested in this subject is the inclusion of a most extensive bibliography of 377 references.

LEONARD L. MALAMUT, M.D.

Advances in Internal Medicine, V. Edited by William Dock, M.D. and I. Snapper, M.D., Chicago. Year Book Publishers, 1952. pp. 464. ($10.50)

There are times when one tires of confining his medical reading to journals, with their emphasis on new methods of diagnosis and treatment, interesting case reports and pertinent practical points. A serious study of one field is wanted, a report that may have little or no practical significance, but is of interest for its own sake. For the internist, the annual publication of Advances in Internal Medicine admirably fills this need.

The fifth volume contains monographs on nine medical subjects of current interest to the internist: diseases of pregnancy affecting offspring, cardiac catheterization, portal hypertension, anemia of infection, gout, ganglionic and adrenergic blocking agents, influenza, ACTH and cortisone, and multiple myeloma. Each section is written by well-known authorities among whom the following names will be familiar: Murray Bass, Richard Bing, Arthur Blakemore, Max Wintrobe, Alexander Gutman and Charles Ragan.

In the first paper, Dr. Bass reviews the maternal diseases that produce congenital abnormalities. He considers the pathogenesis of such deformities, and discusses at length the influence of maternal rubella. He concludes by advising therapeutic abortion for mothers who contract German measles in the first trimester only if there is some exceptional circumstance. Pooled gamma globulin may be of value prophylactically in such cases.

In the second chapter Dr. Bing describes the catheterization findings in a variety of congenital cardiac defects. The method of presentation and diagrams used are similiar to a review that Dr. Bing wrote for the *American Journal of Medicine* in the past year. Dr. Blakemore has written a searching evaluation of portacaval shunt operations in the management of portal hypertension. The remaining reviews are of equal worth and excellence.

This volume will not provide the reader with the latest treatment for this or that, it will not survey the whole field of internal medicine for him. But it will provide a broadening background of basic material, well presented and well organized.

R. D. GOODMAN, 2ND, M.D.

Volume 50
Number 5

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI May, 1953 No. 5

SOME URGENT PROBLEMS IN TUBERCULOSIS

By Edgar Mayer, M.D., Health News, December, 1952.

Now that the excitement has abated over the "Miracle drugs," the isonicotinic acid hydrazides (which one had vainly hoped would settle our problems in tuberculosis once and for all), we must again settle down to treating the disease by all available means. There is a widespread tendency to belittle the task ahead since there is little appreciation of the true size and complexity of the problems facing us. It is often said that with the addition of the new drugs effective against the tubercle bacillus, our task has been greatly simplified. The fact is that with every step of advance new problems arise which must be solved before the new advance can be utilized properly. This is true also for the isonicotinic acid hydrazides. We know now that these drugs are useful agents effective against tubercle bacilli, but by now we also know that they fall far short of the cure of the disease. To make proper use of them we must first solve the problem of how they can best be fitted into our present scheme of treatment. This is a problem of no small proportion and it is one of great urgency. We clinicians must find as soon as possible, answers to several questions:

(1) Should the drugs be reserved for patients who have become resistant to streptomycin (S.M.) and para-amino-salicylic acid (P.A.S.)?

(2) Should the drugs be used at the start in combination with S.M.; or with S.M. and P.A.S.?

(3) What are the optimal dosages and optimal durations of treatment for the combinations of the drugs?

(4) Can these combinations be used intermittently —at long intervals and in minimal dosage—for many years to render and keep tubercle bacilli in the body permanently nonviable?

Attempts to answer these questions have of course been started. From experimental studies some guide-posts have emerged. The new drugs best designated as "synthetics" (in contrast with streptomycin which is an antibiotic) are definitely not as effective against tubercle bacilli as is S.M. Resistance to synthetics emerges sooner than to antibiotics. However, the synthetics have small molecular structure enabling them to penetrate into the depth of necrotic lesions and can reach the bacilli at places where S.M. cannot. The synthetics are apparently mostly devoid of such toxic effects as S.M. and P.A.S. possess when given in large quantities.

Obviously the answers to these questions will profoundly affect not only immediate treatment but our entire scheme of tuberculosis control.

It will probably take years before the answers to these questions will be forthcoming. Until then the drugs are unfortunately being used widely in haphazard fashion. Current experience will therefore teach us chiefly how not to use them. As in the first period with the use of S.M., there will emerge a resultant large number of cases with resistant organisms. This leads us to our next major current problem, *"the arrested case"* of pulmonary tuberculosis.

The Arrested Case

When are residual lesions, that remain after chemotherapy, arrested? We no longer have the criterion of positive sputum to guide us. We are

confused as to the question of the further treatment of these patients. Some strongly believe in the final surgical excision of all such lesions and are convinced that such is the only answer. Others believe that most of these lesions can be permanently healed medically and that excision is not needed. As in the past, so now, they are convinced that such lesions can be left for the body to hold under control by its own biological forces, and that the risk of major operation for the removal of such residues is not justified.

How many of these lesions will flare up again? Obviously only long range observation will answer that question. Even if we decided that all such lesions should be removed, it would not be practical to do so. First, the number of these cases is by now so large that we practically lack the facilities to operate on all of them. Second, it is quite unlikely that more than a minority could be persuaded to submit to the operation. Most of these patients must be turned back sooner or later to their families and their jobs. Time alone will tell how many of them will relapse and how soon. *This in turn brings up several questions:*

(1) How much of a source of new infection do these cases represent?

(2) Are we physicians continuously returning to the population sources of infection which keep tuberculosis morbidity persistently high?

High Morbidity Rate Poses Problem

The urgency of the answers is difficult to overemphasize. The most alarming feature of the present phase in tuberculosis is the persistently high morbidity. As our statisticians have recently repeatedly pointed out, the decline in the mortality from tuberculosis continues sharp. In contrast, the number of people with tuberculosis has tended to remain very high. The problems posed by persistently high morbidity are manifold and complex and serious. Mary Dempsey (Statistician of the National Tuberculosis Association) most recently stressed the continued magnitude of the public health problem. She sounded a warning against the tendency to belittle its seriousness. It seems that too much discussion in the lay press regarding current progress in tuberculosis has tended to mislead not only the lay public, but even large sections of the profession, into believing that tuberculosis is no longer a major public health problem. We clinicians engaged in the management of the patients are now even more than ever troubled by the dangerous potentialities inherent in the so-called "arrested cases of tuberculosis" that are returned to their families and jobs. We are now especially faced with the problem as to how much control we should exercise over their lives.

All of these are urgent and serious problems. The answers to these questions must be worked out very carefully and will require considerable time.

ANNUAL MEETING AND CLINICAL SESSION

NEW JERSEY TRUDEAU SOCIETY

Veterans' Administration Hospital, Lyons, N. J.

MAY 13, 1953

"TUBERCULOSIS AMONG MENTAL PATIENTS"

Presiding: Harold S. Hatch, M.D., Superintendent and Medical Director, Shonghum Mountain Sanatorium, Morristown, New Jersey.

Opening Remarks: Martin H. Collier, M.D., President, New Jersey Trudeau Society.

TREATMENT OF TUBERCULOSIS IN PSYCHOTIC PATIENTS

Abraham M. Balter, M.D., Chief, Medical Services, Veterans' Administration Hospital, Lyons, New Jersey.

COLLAPSE AND RESECTIONAL THERAPY FOR PULMONARY TB IN PSYCHOTIC PATIENTS

George N. J. Sommer, Jr., M.D., Consultant in Thoracic Surgery, Veterans' Administration Hospital, Lyons, New Jersey.

Discussants: Archie Crandell, M.D., Superintendent, New Jersey State Hospital, Greystone Park, New Jersey.
Crawford N. Baganz, M.D., Manager, Veterans' Administration Hospital, Lyons, New Jersey.

CHANGES IN THE PATHOLOGY OF TB AS BROUGHT ABOUT BY THE USE OF CHEMOTHERAPY

Oscar Auerbach, M.D., Pathologist, Veterans' Administration Hospital, Orange, N. J.

Discussant: Joseph A. Smith, M.D., Superintendent and Medical Director, N. J. Sanatorium for Tuberculous Diseases, Glen Gardner, N. J.



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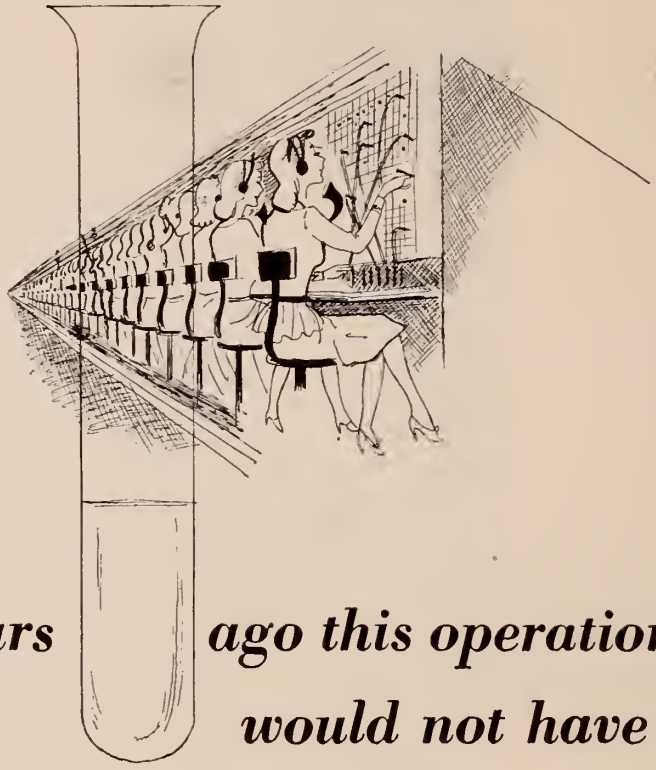
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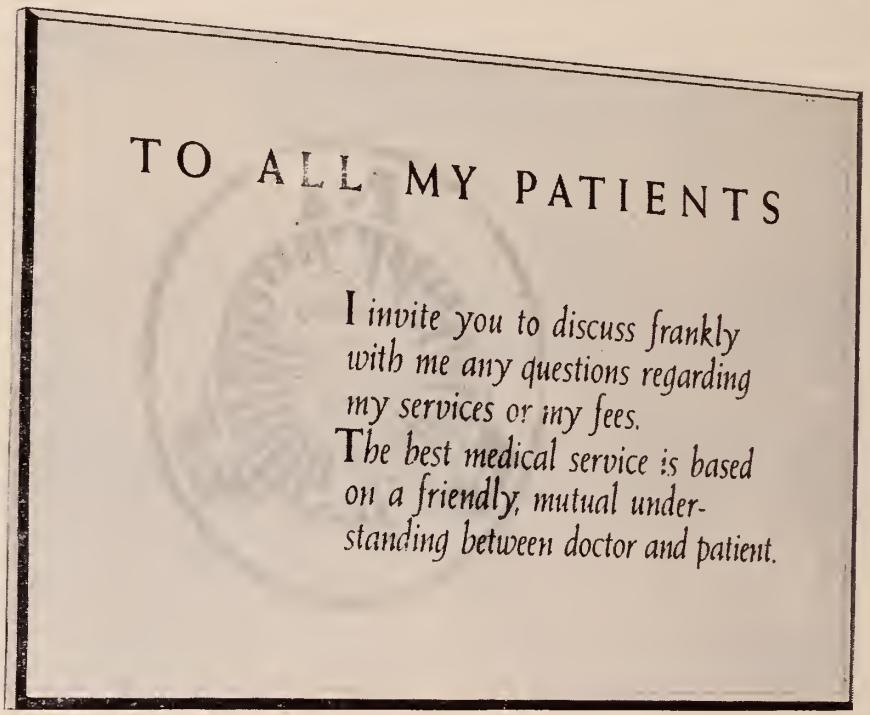
* AMA Council Accepted
** T.M. for Sublingual Tablets, Abbott
1. Reich, W. J. et al. (1952), A Recent Advance in Estrogenic Therapy. II. Amer. J. Obst. & Gynec., 64:174, July.

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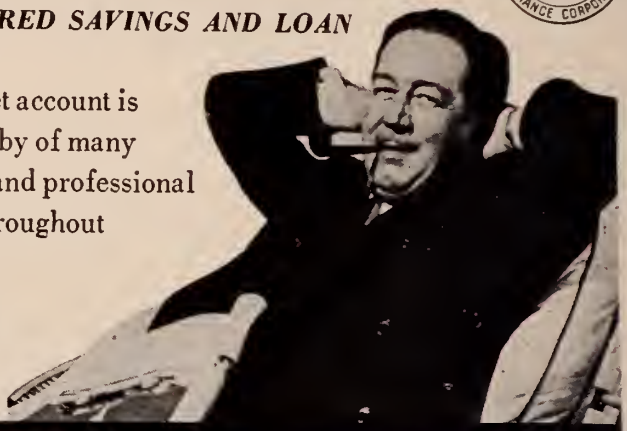
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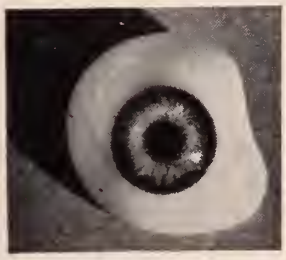
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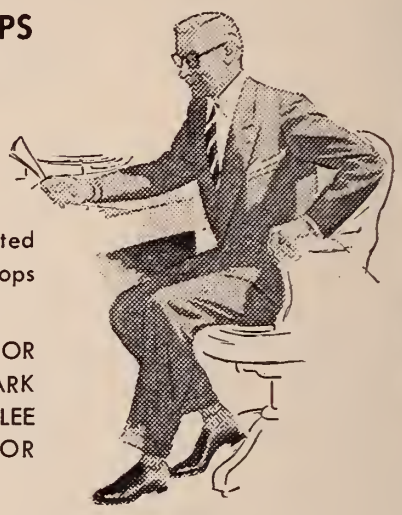
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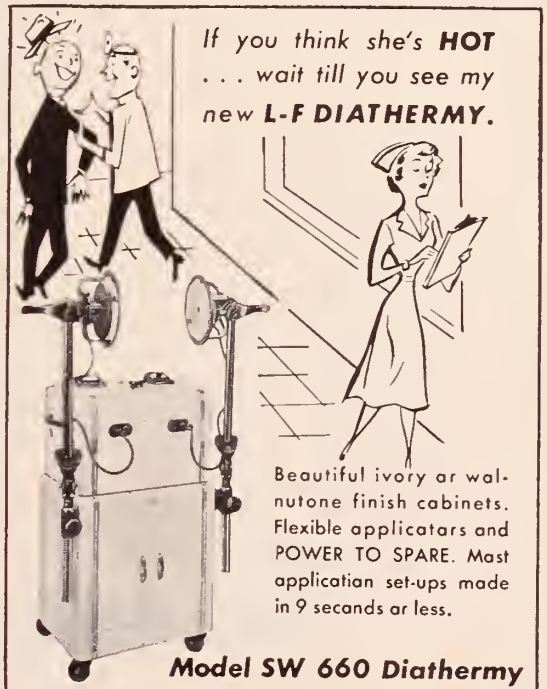
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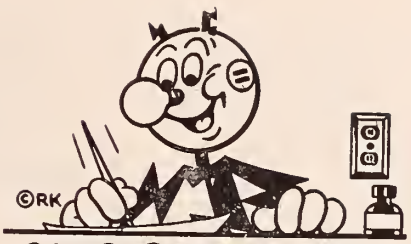
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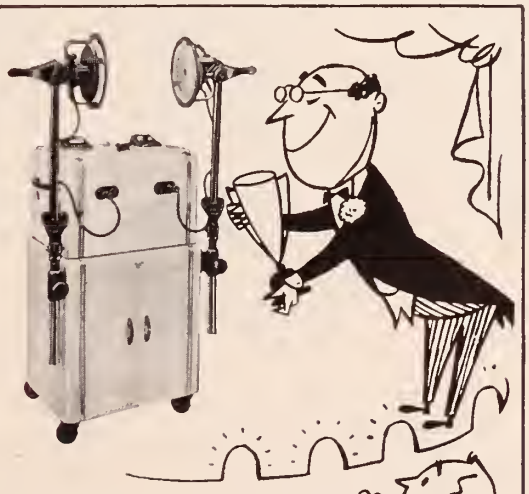
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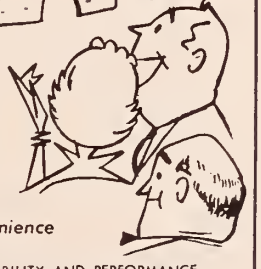
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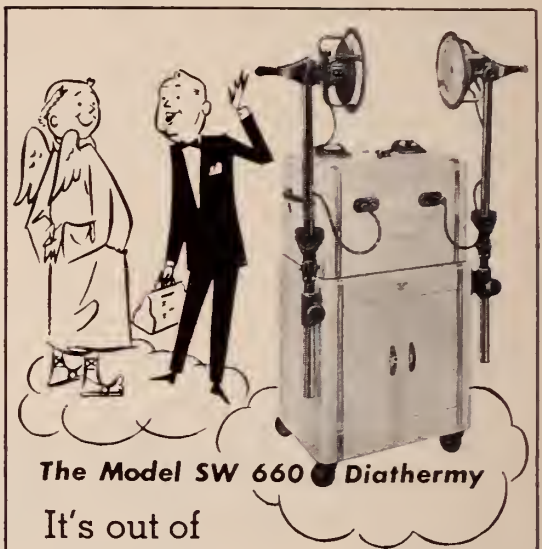
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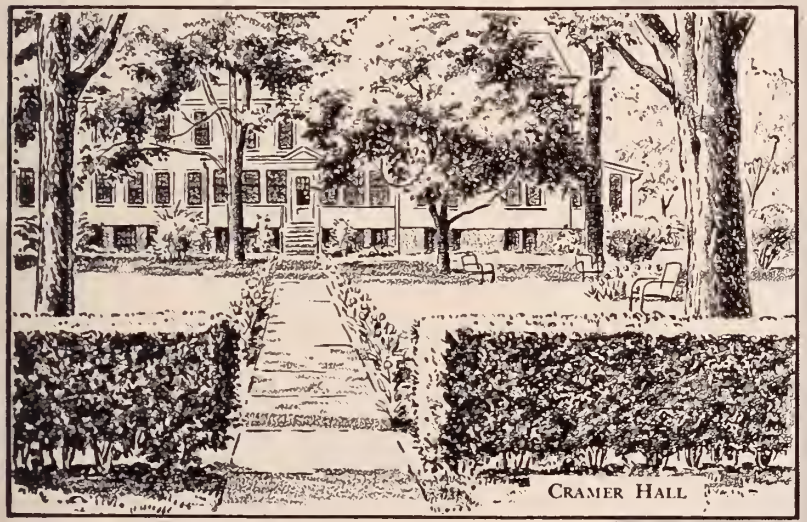
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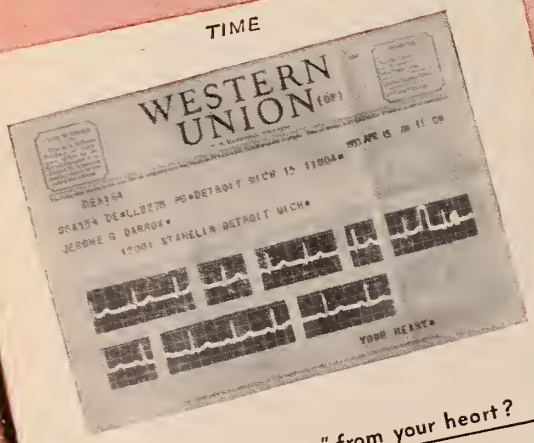
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When interpreted by your doctor, such "telegrams" may read: "Patient's heart normal — no need for worry." Others may say: "Patient's heart faulty — help required."

Yet, even when the heart sends out a message of trouble, it does not necessarily mean impending tragedy. For even a defective heart is capable of working for years if not overburdened.

Thousands of people are living good lives with bad hearts because they acted wisely and in time.

First they did not ignore the warnings that often precede heart trouble—shortness of breath, pains in the chest, irregular beating of the heart, and extreme fatigue. They heeded these warnings in time. Knowing that the advantage of the depended on taking prompt advantage of the help which medical science could give them.

Second, they accepted the limitations and restrictions imposed by a weakened heart. They tried not to "overdo", they learned to avoid sudden extremes and to keep weight at the normal level. They also recognized the value of sleep and relaxation, and the importance of freeing their lives from worry and strain.

Remember that as your physician's hands, you are in good hands. For today, physicians are better equipped than ever before, to treat and control heart disease—and to guard against it as well. By taking advantage of the help your doctor can give you now, you increase your chances of living a good life with a bad heart.

Research groups from the National Heart Institute, the American Heart Association, scores of universities, hospitals, pharmaceutical companies, medical and private agencies are constantly seeking new knowledge which will help physicians to control heart disease and prolong active life. Parke, Davis & Company is a unit of this great medical team. For 80 years, it has been privileged to play its part in the great unfolding of medical science. Today, it is proud to carry on with the same spirit of dedication which made it a pioneer in this field.

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SATURDAY EVENING POST



This man is his own worst enemy! Yet most of us can sympathize with him—for most of us don't run to the doctor every time we have an ache or pain.

We're much more likely to say "Oh, I'm all right. It's really nothing" or to tell ourselves "I'm too busy . . . haven't time to bother with doctors."

Yet the man (or woman) who ignores seemingly minor symptoms often runs the risk of inviting much more serious ailments. That's because most diseases throw no neglect; the wrong thing we can do is to ignore warning symptoms until it may be too late for the doctor to help.

Medical research in America today is a shining case of the most heart-warming chapters in the story of mankind. Our great laboratories, our hospitals, universities and clinics are cooperating as never before to improve our chances of living a longer, healthier life.

Your own doctor has at his disposal all of the discoveries, all of the knowledge of modern medical science. But you are the only one who can put these vast resources to work to help you.

So next time you are tempted to ignore warning symptoms, remember that your presence is your physician's hands. You remember, how easy to neglect, or to avoid such advantage of the help he can give you now.

This message is published in the public interest by Parke, Davis & Company.
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LIFE

DO YOU KNOW THIS MAN?

HIS NEGLIGENCE IS CAUSING THOUSANDS OF DEATHS FROM HEART DISEASE

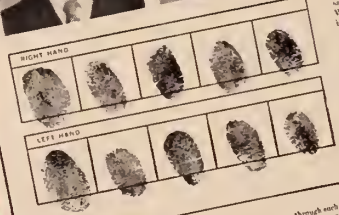


Here's a description of the culprit:

Overweight. Short of breath. (The old ticker really pounds on a flight of stairs.) Often over-exercises on week-ends after a sedentary week. Sometimes bothered by a peculiar swelling in the ankles.

Works too hard. (Feels he's indispensable in his job.) Has trouble relaxing. Worries. Sleeps poorly. Complains of being always tired.

Had a couple of attacks of "indigestion" recently. When asked by wife to phone doctor, was heard to reply: "What for? I'm not sick enough. I'm too busy!"



The greatest problem in dealing with heart disease today is the man or woman who ignores the "danger signals" until it may be too late to take advantage of the help which medical science today is prepared to give. Yet thousands of people are living good lives with bad hearts because they acted wisely and in time because they know that in their physicians' hands they were in good hands.

For it is a fact that much progress has already been made in dealing with heart ailments, and more and more research is being carried on, largely through such great agencies as the American Heart Association and its nation-wide chapters, the National Heart Institute, and a number of pharmaceutical companies, including Parke, Davis & Company, since 1866 makers of medicines prescribed by physicians.

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ertisements addressed to the general public . . .

ysician, you're in good hands"

ect . . . delay. How many times, doctor, have you
l for patients . . . whose hope of recovery might
been bright indeed . . . *but for neglect or delay in*
ng your help?

ndoubtedly, this occurs so often . . . and usually with
tragic consequences . . . that many physicians view
the greatest problem facing medical science today.

preover, this problem may assume even greater
icance with the rising incidence of the degenera-
liseases. For in these conditions, neglect and delay,
u well know, are *directly* responsible for a heavy
f life.

believe you will agree that this problem deserves
ased and continuing emphasis. This is why Parke-
will publish, throughout 1953, a series of adver-
ents on the *patient's responsibility* in medical care.

ese advertisements, four of which are reproduced
will appear in leading magazines reaching mil-
of families. In them, this central theme will be
asized:

That every individual, if he wants his physician's most effective help, must meet the doctor halfway. *He must not ignore symptoms, or delay treatment. He must act promptly . . . and be made to realize that "in the hands of your physician, you're in* good *hands."*

In addition, the advertisements will stress the fact that medicine has a vast store of new knowledge . . . and that this knowledge is constantly increasing through research by physicians, hospitals, public and private health organizations, and pharmaceutical companies.

A word about the preparation of these advertisements: They have been carefully written to avoid both the possibility of stimulating hypochondria and encouraging self-diagnosis. Equally important, the advertisements make no claims that might cause undue optimism or raise false hopes. We believe these are just the type of informative messages you will want your patients to read. Our efforts will be guided and encouraged by your continued interest and comments.



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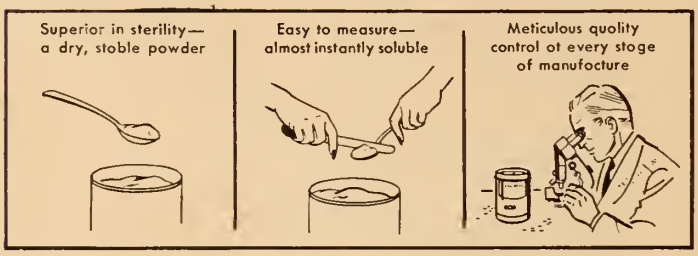
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OF

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CONTENTS—Pages 239 to 286

EDITORIALS— Page

OUR NEW PRESIDENT 239
AMERICAN SCIENCE IN DANGER 240
NEW JERSEY POET LAUREATE 241

ORIGINAL ARTICLES—

SUDDEN DEATH IN INFANCY—William B. Nevins, M.D., East Orange, N. J. 242

METRAZOL—ITS PLACE IN GERIATRIC THERAPY—Joseph O. Smigel, M.D., Lawrence N. Serhus, M.D., and Samuel Barmak, M.D., Pinewald, N. J. 248

PREVENTION OF TRANSFUSION REACTIONS BY INTRAVENOUS CHLOR-TRIMETON MALEATE—Frederick M. Offenkrantz, M.D., Solomon Margolin, Ph.D., and Dorothy Jackson, B.S., Paterson, N. J. 253

THE METABOLIC CONSEQUENCES OF TRAUMA—John H. Bland, M.D., Burlington, Vermont 256

ORIGINAL ARTICLES— Page

PRANTAL METHYLSULFATE IN GASTROINTESTINAL DISEASES — Francesco D'Imperio, M.D., Camden, N. J. 265

LETTERS TO THE JOURNAL 274

ANNOUNCEMENTS—

Cancer Fellowships 264
Toxemia Research Contest 273
Cardiovascular Traineeship 275
Orthopedic Contest 275
Black-Stevenson Memorial Clinic 277
Radioactive Gold Available 280

OBITUARIES 276
PUBLIC HEALTH NEWS 277
COUNTY SOCIETY REPORTS 278
WOMAN'S AUXILIARY 281
BOOK REVIEWS 283
TUBERCULOSIS ABSTRACTS 285

Roster of Officers, Advertising page 3A

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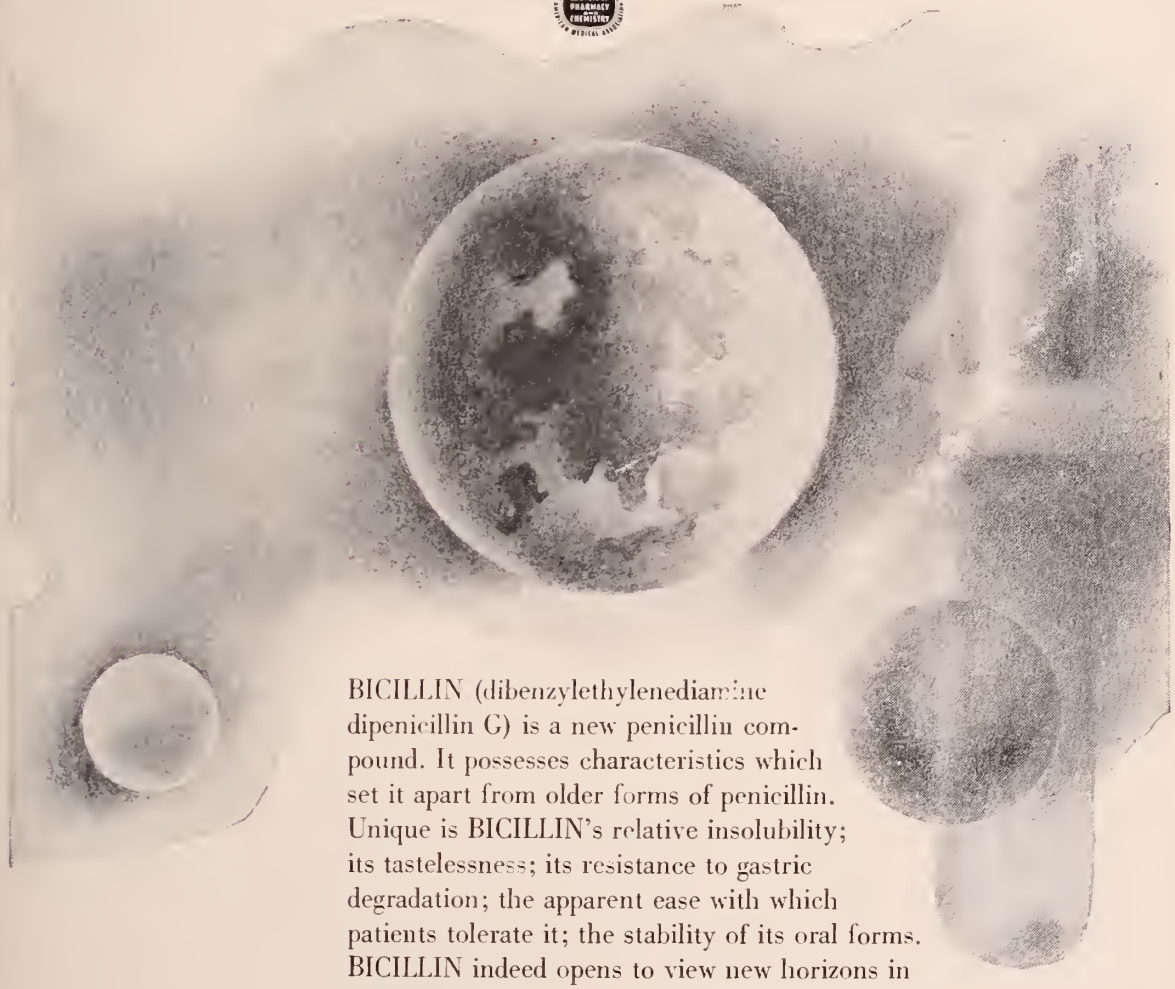
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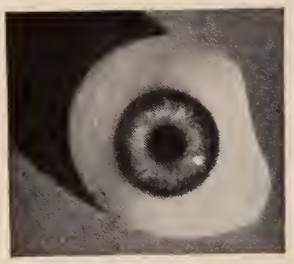
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Deucher, F.: Schweiz. med. Wchnschr. *82*:1 (Jan. 5) 1952.

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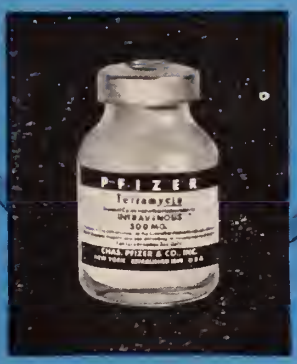
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Farley, W. J., Konieczny, L.: J. Pediat. *42*:177 (Feb.) 1953.

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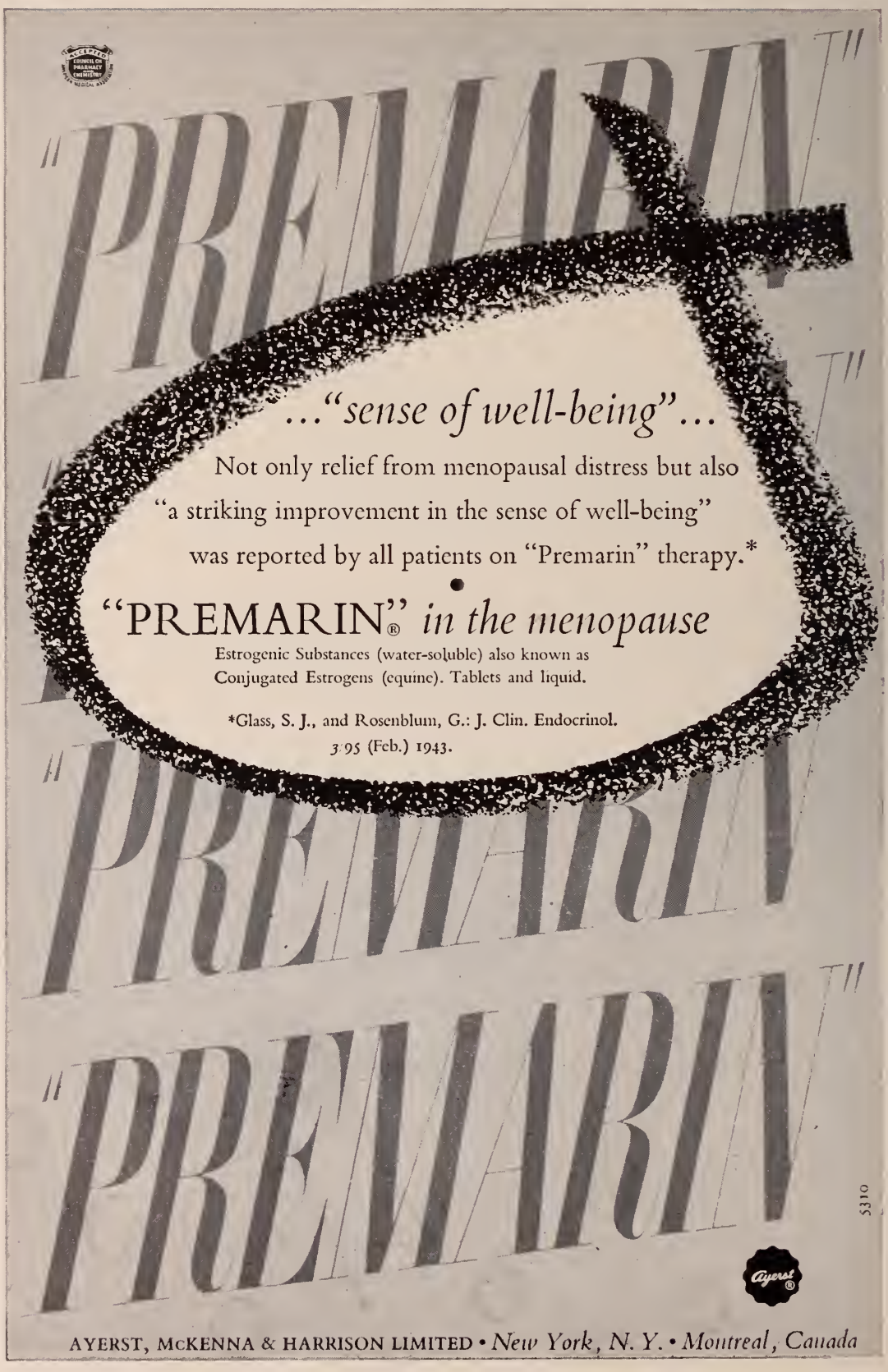
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Reiss, E., et al.: A. M. A. Arch. Surg. *64*:5 (Jan.) 1952.

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*Glass, S. J., and Rosenblum, G.: J. Clin. Endocrinol.
3:95 (Feb.) 1943.
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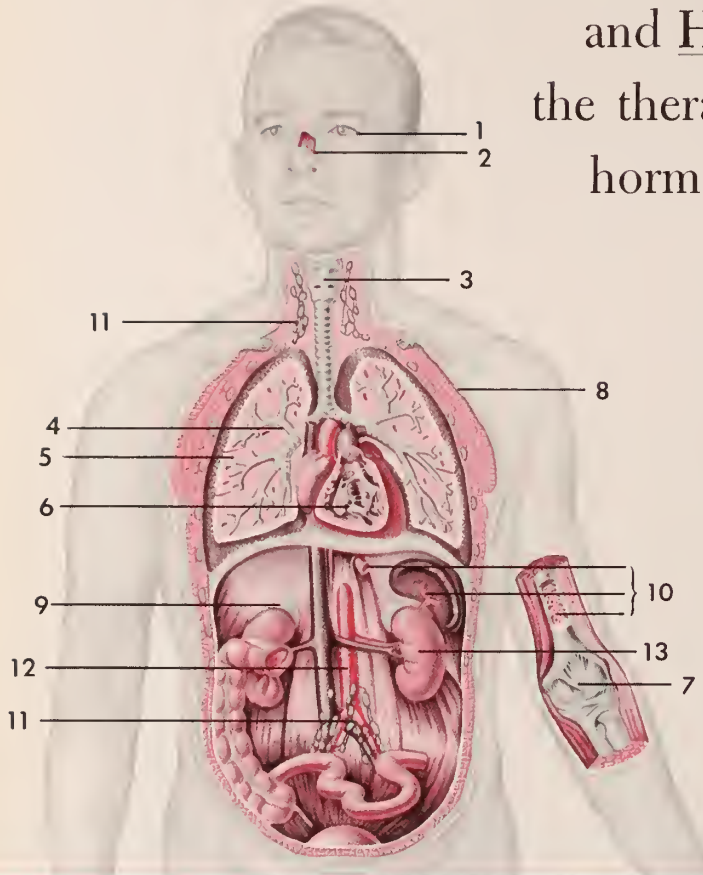
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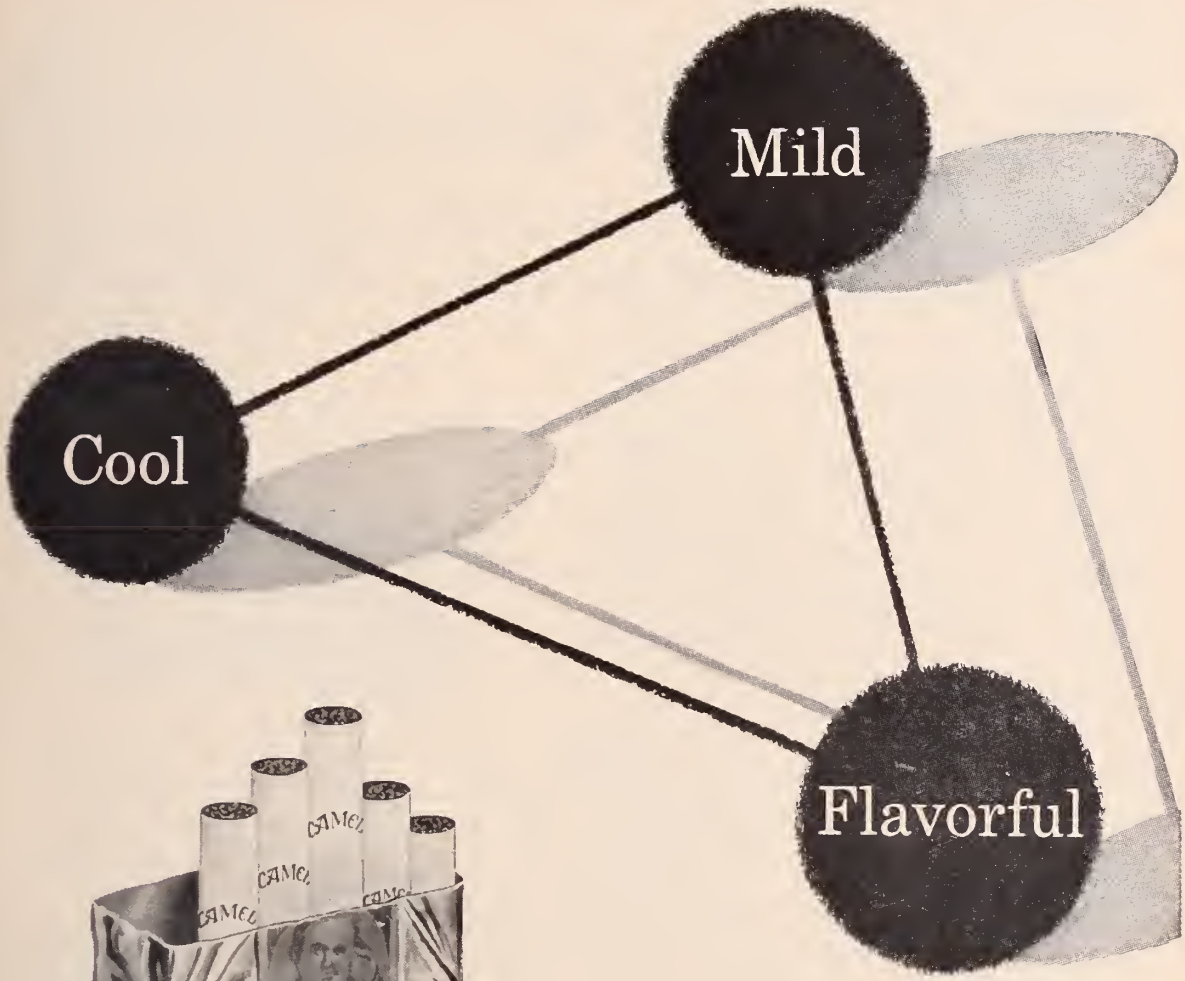
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1. Humphreys, P., *et al.*: Angiology 3:1 (Feb.) 1952.
2. Plotz, M.: N. Y. State J. Med. 52:2012 (Aug. 15) 1952.
3. Dailheu-Geoffroy, P.: L'Ouest-Méd., vol. 3 (July) 1950.

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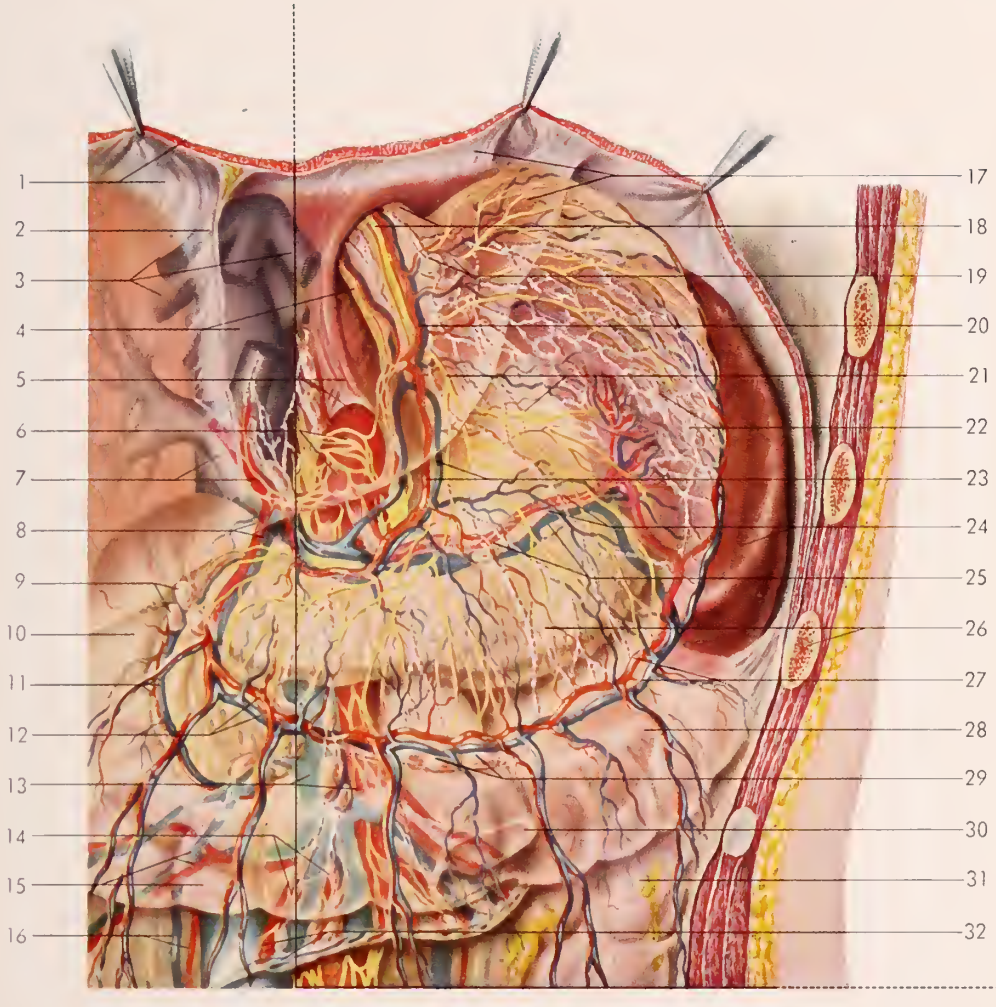
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7 Hepatic artery and portal vein
8 Gastroduodenal artery and vein
9 Subpyloric lymph nodes
10 Duodenum
11 Superior pancreaticoduodenal artery and vein
12 Right gastroepiploic artery and vein
13 Superior mesenteric artery and vein
14 Superior mesenteric lymph nodes
15 Transverse colon and right colic artery and vein
16 Spermatic artery and vein
17 Left triangular ligament and left lobe of liver
18 Esophagus and left vagus nerve
19 Paracardial lymph nodes
20 Esophageal branch of left gastric artery and vein
21 Gastric rami of vagus nerve
22 Splenic lymph nodes
23 Left gastric artery and coronary vein
24 Spleen and splenic artery and vein
25 Superior pancreatic lymph nodes
26 Pancreas and tenth rib
27 Left gastroepiploic artery and vein
28 Left kidney
29 Inferior gastric lymph nodes
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1 Crowe, S. J., etc. al., Penicillin & Tyrathricin in Otalaryngalagy Based on a Bacterialagical and Clinical Study of 118 Patients, Ann. Otal., Rhinol. & Laryngal. 52:541, 1943.

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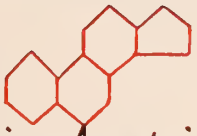
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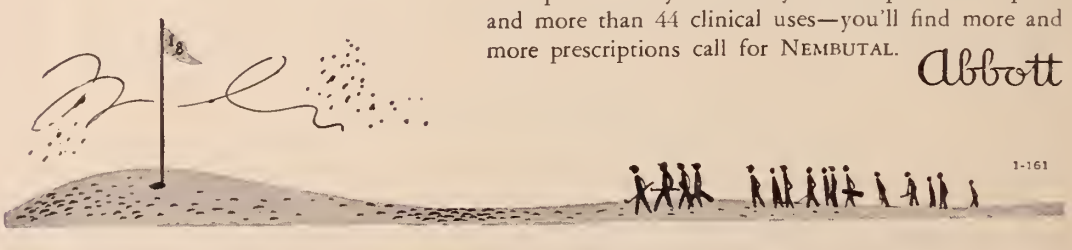
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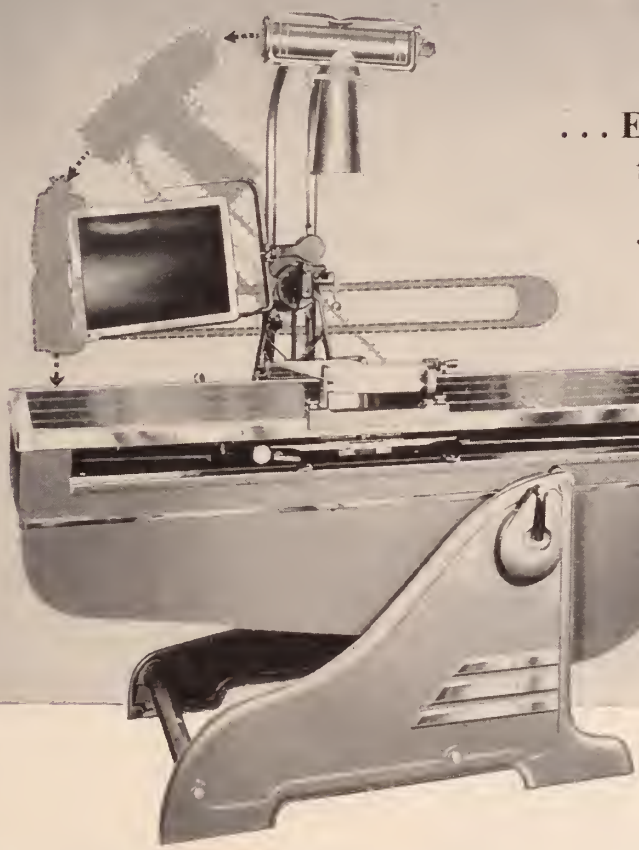


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OUR NEW PRESIDENT



In Henry B. Decker, The Medical Society of New Jersey welcomes as its new President a man whose capacities for leadership have been developed through a lifetime that happily combines both academic and practical activities.

Dr. Decker is a full-fledged citizen of our state, born in Jersey City in 1893, and a resident of Camden County from 1904 to the present. He is a graduate of Jefferson Medical College, class of 1920. After an internship at Cooper Hospital, Camden, he began practice in that city in 1921. He is now Professor of Dermatology at Jefferson and attending dermatologist at both Cooper Hospital and the Jefferson Medical College Hospital. He is consultant in dermatology at the Burlington County Hospital.

Dr. Decker has long been interested in

the affairs of our medical society, and has held many offices in the Camden County Medical Society. On the state level, he made an outstanding contribution to medical education as chairman of the Post-Graduate Education Committee. He has also served as chairman of the Medical Practice and Hospital Relationships committees.

Dr. Decker has three children and two grandchildren.

All who know Dr. Decker recognize him as a sincere man, determined to do his best for our society and the profession. We are proud to have him for our President this year, and can be secure in the knowledge that there is a firm hand at the helm.

AMERICAN SCIENCE IN DANGER

Today's physician has a large stake in the status of American science, both as a lay beneficiary of its progress and as the transmitter of its medical achievements to his patients. In a provocative article Melba Phillips* has outlined the dangers confronting American science, and has suggested a program for improvement.

During the past ten years science in the United States has undergone a perceptible transformation. Because of its outstanding contributions it has won wider public support than ever before. But unfortunately, it has become diverted in part from its optimum goals, which are twofold: the investigation of natural phenomena for humanitarian ends and the acquisition of knowledge for the sake of knowledge itself. As a result of the last world war and the present unhappy international situation, too much of scientific research today has been turned to the development and perfection of more deadly means of destruction and away from the enrichment of peaceful living. "Pure" scientific research has been affected, except in the field of atomic and nuclear physics, with its obvious military implications. As a further example, even in medical research emphasis is placed on the spectacular and the sensational, the finding of a cure-all or panacea, while little room is given to encourage the time consuming exploratory work that is the foundation of sound medical progress.

A seeming contradiction in research today is the emphasis placed on bigness. Research apparatus and laboratories have become almost factory-sized in scope, so that supervision of technicians and management of massive and complex apparatus occupy the major portion of a researcher's time, leaving him small opportunity for teaching students, or actual work in the laboratory itself.†

Perhaps even more damaging to science today are the restrictions placed on freedom of thought and communication. Clearing of students and researchers, restricting publication of significant data, denying passports and visas for American and foreign scientists are body blows to the progress of science, which must remain open to confirmation or contradiction by worldwide research.

These diversions, limitations, and suspicions have done immeasurable damage to the morale of professional men, who function best in an open, free, and unhampered atmosphere.

* Phillips, M.: Dangers Confronting American Science. Science 116:439, October 24, 1952.

† Yet the history of scientific progress records that some of the most striking advances were made by individual investigators working in small, simple laboratories.

Before it is too late, and before American science fails in its responsibilities, a three-fold program is advanced by Phillips. First, she urges that scientific work be done in the public domain, where it can be freely published, taught, and criticized. Second, scientists should be unfettered of all restrictions on personal freedom. Third, the broader implications of all scientific work must be appreciated, so that military goals alone will not have the lion's share of financial support.

Ideal as this program is, it must be modified in the light of present circumstances. Freedom to publish, teach and criticize must remain the beacon of our aspirations, but common sense dictates that such freedom cannot jeopardize national security. Only the soundest judgment is capable of drawing the fine line between restrictions for security and the restrictions of tyranny. This problem is not limited to science but is germane to our entire civilization and culture today. Similarly, restrictions on the personal freedom of scientists arise not from the whims of bureaucratic rulers, nor from the fear that scientists as a whole are foreign agents, but to protect us all from the defection of the unscrupulous few. In like manner, the pursuit of pure science, free and untrammeled, remote or ridiculous is a noble idea, but practical considerations of national survival require some modification of this ideal concept.

It can be seen that these matters pose great and delicate problems, and require mature thought coupled with sound judgment. Our best scientific minds must be mobilized to meet these questions.

NEW JERSEY POET LAUREATE

That everyone should have an avocation is widely accepted and practiced. The work of the physician is arduous, intense, and charged with emotional attributes which make it even more fatiguing and difficult. To him, the cliché that "All work and no play makes Jack a dull boy," especially applies. The busy physician is constantly faced with major decisions, decisions that may mean health or disability, even life or death, to his patients. Often these problems require on the spot, split-second decision, with little time for reflection, cogitation, or consultation. To keep his mind clear and open, to prevent mental stagnation and narrowing, a physician needs a hobby to fill what little free time is available to him. Such a hobby may be anything from poker to ornithology, from golf to music, from fishing to flying, but whatever it is, each of us should have one.

Of the thousands who have hobbies, only a few have one that produces profit or fame. New Jersey numbers among its physicians one who has gained from his hobby some profit, and much renown. This, too, in a field rare for the physician—poetry. William Carlos Williams, of Rutherford, is nationally famed for the quality of his verse—and has actually won several prizes in this field. In 1926 he won the $2000 Dial Prize for service to American literature, in 1931 he won the Guarantor's Poetry Prize, and this year was awarded the $1000 Bollingen Prize for poetry.

Dr. Williams has, with striking success, achieved a happy combination of vocation and avocation — the active practice of medicine and successful venture into an art. To this distinguished colleague go our heartiest admiration and congratulations. We wish him many years of continued success.

ORIGINAL ARTICLES

SUDDEN DEATH IN INFANCY*

William B. Nevius, M.D., East Orange, N. J.

This critical review of the problem of sudden infantile death stresses the unlikelihood that it is caused by mechanical suffocation. Careful investigators have proved that undetected disease or acute overwhelming infection are far more likely to produce fatalities of this type.

Anyone who reads regularly a large metropolitan newspaper is impressed with the number of times he sees an item about a small infant found dead in bed. This is an extremely tragic situation for the parents and a very unpleasant one for the physician, frequently a pediatrician, who is called to the home. It is usually impossible to ascribe the death to a particular cause, and such explanations as accidental mechanical suffocation, enlarged thymus, and status thymolymphaticus are frequently called upon. It is the purpose of the writer to review the literature on this subject and to present the various points of view pertaining to it.

Theory of Mechanical Suffocation

During World War II, there was apparently a considerable increase in the incidence of sudden death in infancy, which led the Metropolitan Life Insurance Company, in 1952, to describe it as the greatest hazard of infancy. Abramson,[1] who is a stout defender of the mechanical suffocation theory, in 1944 pointed out that the annual deaths from suffocation exceeded those from measles, scarlet fever and diphtheria combined and equalled those from whooping cough. He analyzed the death reports on 139 infants under one year of age, dying between January 1939 and December 1943, and drew the following conclusions: The preponderance of death by smothering (85%) occurred in infants under six months with a median age at death of two to three months; 69% were male and 31% female. The peak of fatalities was reached during the late fall and early winter months, November through January. Death took place most often between 3:00 and 9:00 A. M., which he considered significant in relation to the 2:00 A. M. and 6:00 A. M. feedings, the babies being left unattended because their parents were sleeping. During the morning hours 35% of the accidents occurred in cribs and 15% in the mothers' beds. In the afternoon and night hours baby carriages and cribs were almost equally divided as sites of accident. Blankets, outer coverings, mattresses and pillows were considered the smothering agents. Where death occurred in the parent's bed, pressure from the weight of the mother's breast or upper extremity was responsible. The posture most frequently noted on discovery of the infants' bodies was the face-down or prone position in 68%, and of these, 55% were under five months of age. In only 17% of the fatalities were the bodies found in the face-up position, and almost all of these infants were five months of age or under. In 46% of the babies found in the face-down posture, a single agent such as pillow, mattress, or mattress covering was occluding the nose and mouth, while in 22% an added agent, such as pillow or blanket, covered the heads. In the face-up posture pillows and blankets were found covering the infants' faces. Death from overlaying comprised 15% of the fatalities from smothering and involved very young infants from two weeks to three months of age. These accidental deaths occurred most frequently during the early morning hours.

Abramson spent the rest of the article in describing the proper wearing apparel and

*Read before the Orange Mountain Medical Society January 16, 1953.

the proper arrangement of the crib and carriage for greatest safety. He made no reference whatsoever to the possibility that these children might have died from natural but unrecognized causes.

UNRECOGNIZED NATURAL DISEASE

On the other side of this question, we have the opinion of Dr. Keith Bowden,[2] coroner of Melbourne, Australia, that in reality the majority, if not all, of these infants die of unrecognized natural causes. Two cases pointed up this problem to him. One was a female child aged twenty-two days who was a little underweight. Although she had not progressed as well as expected, nothing serious was believed wrong. On the afternoon of her death she was picked up and fed and was then put to bed on her side, when she appeared to collapse. When the doctor arrived she was dead. Post-mortem examination revealed typical tuberculosis of the lungs. In another instance a child aged twenty months thought to be well, vomited and died suddenly while he was being fed. It was thought the baby might have suffocated from inhalation of vomitus in view of the fact that aspirated material was found in the bronchi and bronchioles. The gross findings at autopsy were inconclusive, but microscopic examination revealed acute interstitial myocarditis.

In another case an infant aged three years was said to have had two epistaxes and was admitted to the hospital, where he was given a blood transfusion. Sixteen hours after admission he died suddenly. Autopsy revealed intense edema of the lung and considerable congestion of the brain. Microscopic examination revealed poliomyelitis affecting the brain stem. Cellular infiltration had occurred and perivascular cuffing was pronounced.

These cases illustrate three points: (1) Naked eye examination may fail to indicate a fatal pathologic change in the organs responsible for the death of the subject; (2) The presence of vomitus in the bronchial tree, of itself, should not lead to the conclusion that it was responsible for the death of the subject; and (3) a baby may be thought to be well enough, even by trained observers, and yet may be suffering from a fatal illness. As an example of the latter, a child of three years, thought to be well, while playing in the street collapsed and died. Autopsy revealed tuberculosis of the upper lobe of the right lung. There were caseous glands near the bifurcation of the trachea. A caseous gland had eroded through the wall of the trachea. Suddenly it discharged its contents into the trachea, causing death from asphyxia. Thus, although death was described as sudden, serious undiscovered disease had been present for some time. These cases of sudden death may therefore be divided into two categories; (1) Where the baby is overwhelmed in a few hours by fulminating disease, (2) although he dies suddenly, he may have been suffering from natural disease for some time, which was not recognized.

Bowden emphasizes particularly the impact of the tragedy of sudden death on young parents, particularly the mother. If the death is ascribed to accidental mechanical suffocation, the parents feel they are guilty of negligence and suffer much mental anguish needlessly. On the contrary if, after a complete post-mortem examination, including microscopic examinations of the tissue, a natural disease process can be found responsible for the death, a great weight is lifted from the parents' minds.

In the discussion of this paper, Webster offered an explanation as to why these little infants react so suddenly to invading organisms. He cited the experiments of Kahn, where adult rabbits had been injected subcutaneously with small doses of virulent streptococci and only furuncles resulted, whereas young ten day old rabbits exhibited no local inflammatory lesion, but succumbed to a general septicemia within twenty-four to forty-eight hours. Hence the importance of the post-mortem blood culture and the significance of the microscopic examination. Webster also rejected the condition of status thymolymphaticus as a cause of sudden death.

ROLE OF INFECTION

In a very interesting paper, Farber[3] of Boston supports the contention that serious but unrecognized disease is the cause of these fa-

talities in many cases. He points out that the streptococcus is but one of many organisms capable of causing fulminating infection in early life. Others are the staphylococcus, pneumococcus, meningococcus, and dysentery bacillus, although in his experience he has found the streptococcus to be the most common. He observes that the greatest incidence has been found in the winter months, although similar cases occur at all seasons of the year. He reported a case of a child of twenty-six months, who entered the hospital at 6:00 P. M. after convulsions for eight hours. The day before, the child was reported as normally healthy, although the night before admission he slept restlessly. The first convulsion occurred at 8:00 A.M. and there were eight convulsions altogether by 6:00 P. M. The child lay limp and unconscious in bed but was not stiff and the Kernig sign was absent. The white cell count was 33,000 with 82% polys. Convulsions occurred at frequent intervals until the child died ten hours after admission and twenty hours after the onset of the illness. At autopsy a streptococcus hemolyticus was isolated in pure culture from the blood stream and there was early interstitial bronchopneumonia and peribronchitis. There was marked diffuse edema of the brain, optic nerves and spinal cord. Farber remarks that the streptococcus causes death with such rapidity that its killing effect may be compared with that of a powerful chemical poison. He then cited the cases of two infants with almost identical histories, who died at three months of age. One history will suffice for the two cases.

A three month old baby had been given its regular two o'clock feeding, which it took in usual fashion. An hour and a half later, it was found dead in bed, lying on its back. The fire department was called and efforts at resuscitation made. The body was released with a diagnosis of suffocation. At the post-mortem examination, which was requested by the pediatrician, a pure culture of streptococcus hemolyticus was isolated from the heart's blood. In addition, streptococci were grown from the lung and seen in direct smear made from the seropurulent exudate found in the bronchi. There was edema of the brain and spinal cord. Microscopically, a very early interstitial infiltration of the alveolar walls and peribronchial regions was found. There was no evidence of suffocation. Farber does not believe in suffocation as a cause of sudden death in infancy nor in the validity of thymic death. He emphasizes that this is only one of the causes of sudden death in infancy and does not mean that all sudden deaths can be explained on the basis of streptococcus infection. He urges that complete post-mortem examinations be made in all cases of sudden death in infancy.

Thymus Enlargement

At this point it might be well to discuss the relationship of the enlarged thymus to sudden death. About twenty years ago it was believed that there was a causal relationship between enlargement of the thymus and sudden death, especially during surgical operations. It was felt that the enlarged thymus compressed the trachea, causing obstruction. It was also thought that the enlarged thymus in conjunction with the enlargement of other glands of the lymphatic system, a condition known as status thymolymphaticus, rendered an individual more liable to sudden death, particularly during surgical procedures done under general anesthesia. It gradually became recognized that the so-called enlarged thymus and lymphatic glands found in an individual who had succumbed suddenly to death actually represented the true size of these organs in life. The smaller glands usually found at post-mortem are believed to be the result of the frequently protracted illness leading to the child's death. Farber studied the thymus in two thousand consecutive autopsies and concluded that in no case could the gland be considered pathologic in size. Significant causes of death, exclusive of the thymus, were found in all cases. In brief, pathology of the thymus gland leading to sudden and unexpected death must be viewed as a most improbable and infrequent occurrence and one which most authorities in the field are unwilling to accept.

IMPORTANCE OF AUTOPSIES

An interesting study by Davison[4] of Birmingham, England, shows the difference in statistics before and after a regulation became effective that required a post-mortem examination of every case of sudden death. Such a regulation was put into effect in Birmingham in 1938. During the seven years, 1938-1944, the total number of cases reported to the coroner, of which asphyxia was considered the probable cause, was 318. Of these, 108 occurred while the infant was in bed with a parent or other person, and as a result of post-mortem examination only 18 of these 108 were shown to have died from asphyxia occurring mechanically. Of the remaining 210 cases, in which the infant died while sleeping alone, post-mortem examination showed mechanical suffocation as a definite cause of death in only six. Of the 318 deaths, 294 were due to natural causes, 152 to respiratory infection alone, and 77 to a respiratory condition associated with otitis media, 28 to bronchopneumonia plus pyelitis or toxic hepatitis, and 47 to miscellaneous natural causes. Available statistics show that the total number of deaths attributed to asphyxia in the same coroner's area was 130 in the seven years, 1918-1924, prior to the regulation requiring post-mortem examination, when the estimated population was 550,000, as compared with 18 occurring during the seven years, 1938-1944, with an estimated population of one million.

Werne and Garrow[5] of the Office of the Chief Medical Examiner, New York City, also are skeptical of the validity of accidental mechanical suffocation as a cause of sudden death in infancy. During the fifteen years prior to 1947 they investigated 167 consecutive infants under one year of age found dead in crib, carriage or bed while in apparent good health. In no instance did their investigation prove accidental mechanical suffocation of a healthy infant by bed-clothes or in a similar manner. Of the 167 cases, in 43 (or 25.7%) the *autopsy alone* established the presence of fatal disease. The gross findings in these 43 cases which were adequate to establish a natural cause of death, *therefore excluding suffocation,* were the following:

Mastoiditis and otitis media	20
Bronchopneumonia and otitis media	1
Bronchopneumonia	4
Lobar pneumonia	1
Congenital heart disease	7
Congenital heart disease and bronchopneumonia	1
"Idiopathic" cardiac hypertrophy	2
"Idiopathic" cardiac hypertrophy & bronchopneumonia	1
Subdural hemorrhage	1
Bronchopneumonia and subdural hemorrhage	1
Meningitis	2
Internal hydrocephalus	1

In the 124 cases showing *insufficient gross findings* to explain death, comprising 74.3% of their cases, complete *microscopic* studies as a rule showed acute inflammation of the respiratory tract in association with other significant visceral changes. They included tonsillitis, laryngotracheitis, bronchitis, bronchiolitis, interstitial pneumonitis, and hemorrhagic bronchopneumonia not grossly detectable. There were lesions frequenty in the other organs, including the brain, liver, kidneys and lymphatic tissues. These lesions were conspicuously absent from the tissues of thirty-one infants dying of proved violence.

In all of the 124 cases showing at autopsy insufficient gross findings to explain sudden death, the microscopic study indicated fulminating respiratory disease as the best possible explanation for death, with the following exceptions: three cases in which enterocolitis associated with pneumonitis appeared to be the primary cause of death; four cases in which dermatitis was associated with pneumonitis; one case in which post-vaccinal encephalitis was the cause of death; one case in which, in addition to respiratory disease, recent immunization may have been a factor in causing death by delayed anaphylactic shock; and six cases in which no conclusion could be reached because no tissues were available for microscopic study.

Werne and Garrow also investigated 67 other infants who had been observed to die suddenly and unexpectedly under circumstances in which there could be no possible allegation of smothering. It is noteworthy that in these respiratory disease was the usual cause of death. The same cause, i.e. acute respiratory

disease, was the usual one in the cases under present consideration, in which smothering is ordinarily alleged. In 38 infants there were sufficient gross anatomic findings to identify the disease causing death, as follows:

Mastoiditis and otitis media	8
"Idiopathic" cardiac hyperthrophy and otitis media	1
"Idiopathic" cardiac hypertrophy	4
Congenital heart disease	9
Bronchopneumonia	2
Congenital heart disease and bronchopneumonia	2
Lobar pneumonia	1
Interstitial pneumonitis with bilateral hydrothorax	1
Bilateral adrenal hemorrhage due to meningococcemia	3
Bilateral adrenal hemorrhage, in which no organisms were recovered	1
Meningitis due to Friedlander's bacillus	1
Meningitis due to pneumococcus, type III	1
Meningitis due to pneumococcus, untyped	1
Impetigo of new-born	1
Hydronephrosis and pyelonephritis	1
Intraventricular hemorrhage	1

In 29 infants, there were insufficient gross findings to explain death, but completed microscopic study disclosed the same lesions as in the group allegedly smothered, in which acute respiratory infection was established as the primary cause in 22.

The same authors plotted the age incidence, according to months, of the deaths under consideration and showed that they occur infrequently during the first month and after the first year. (See Figure 1) The majority are seen in the first six months, and the peak is reached during the third and fourth months. The relative freedom of the first month of life from this cause of death may be explained by assuming (1) that there is less exposure to infection and (2) that the infant is still protected by maternal antibodies. As these wear off, and contact increases, infections take their toll. Reference is now made to Figure 2, which shows the incidence by month of occurrence of deaths certified as due to acute respiratory disease in New York City in 1942. There is a close correlation between this curve and the three other curves which represent, respectively, Davison's series allegedly dying of suffocation but proved by autopsy as dying of acute respiratory disease, the incidence by

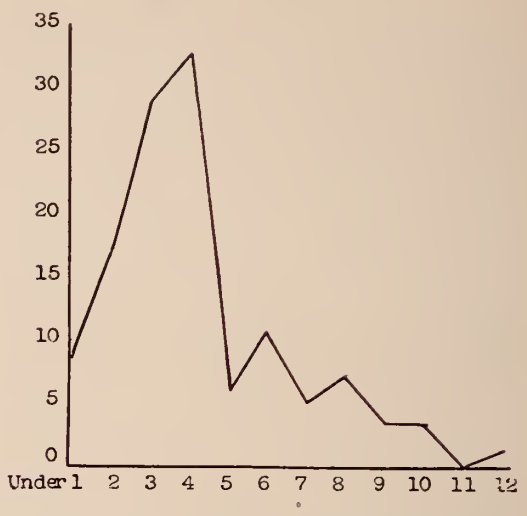


Figure 1. Age of incidence by month of infants dying of alleged mechanical suffocation, 1924 cases, Werne and Garrow.[5]

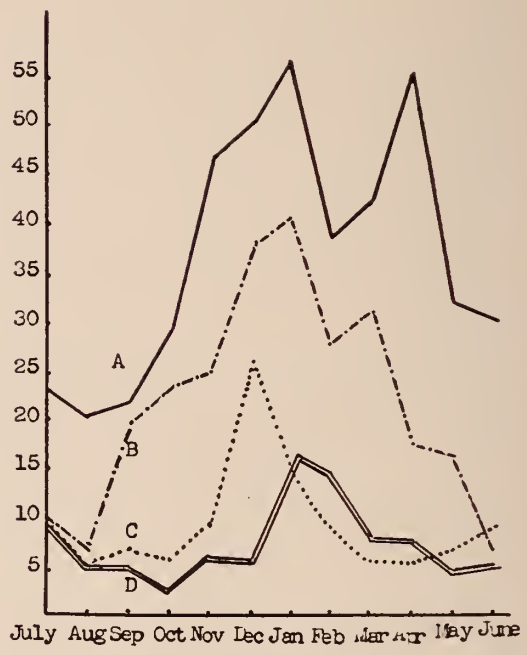


Figure 2. A—Fatalities by month of known acute respiratory disease, New York City, 1942. B—Davison's [4] series allegedly dead of suffocation, proved by autopsy as dying of acute respiratory disease. C—Abramson's [1] series, New York City, 1939-1943, allegedly due to suffocation. D—Werne and Garrow's [5] series, 167 cases.

months of deaths reported in Abramson's article previously referred to, and, lastly, the present study of Werne and Garrow's. It seems difficult to believe that such close correlation in studies made by four different workers from two countries three thousand miles apart could be entirely accidental.

Two writers raise the question as to whether it is reasonable to believe that a healthy three or four month old infant could be suffocated by the mere weight of the bedclothes. If this were the case, death should be more frequent during the first two to four weeks of age when the baby is the weakest. Yet statistics definitely prove that death from alleged suffocation is distinctly rare at that age. Bowden [2] carefully observed the positions a normal baby assumes while sleeping. He noted that the majority of babies two to seven months of age lie on their backs with their hands either up or out. If bedclothes were placed over such babies, they either pushed them away or wiggled around until they found a comfortable position where they could breathe. Babies seven to eighteen months of age usually chose the prone position. Hence, in the case of such babies, if sudden death should occur, they would naturally be found in the face down position.

Woolley [6] of Oregon performed experiments attempting to demonstrate whether there was a reduction in oxygen or increase in carbon dioxide underneath ordinary bedclothes. He found that infants under ordinary bedding showed no discomfort until sufficient time had elapsed for heat and humidity to come into play. Woolley reports that he could find no record of anyone having observed an infant suffocate without benefit of patented sleeping device or other mechanical aid, nor could he find any experimental work which might suggest that anoxemia had been experimentally produced through arrangements of the usual bedding in relation to a normal baby. He therefore analyzed the atmosphere breathed by infants covered in various manners by different types of bedding and was able to demonstrate a reduction in oxygen or increase in carbon dioxide *only after* the addition of a rubber sheet secured tightly at each border. Infants under ordinary bedding showed no discomfort until sufficient time had elapsed for heat and humidity to come into play. He also tried to induce anoxemia by having the infant sleep with the nose and mouth closely approximated to mattresses and pillows, but here again he was unsuccessful since the smallest baby was capable of turning his head to one side or the other and the larger infants expressed their dislike vocally of such a position.

SUMMARY AND CONCLUSION

A review of the literature shows that the consensus of opinion is that when an infant is found dead in bed it is very unlikely that accidental mechanical suffocation has occurred. It is more probable that some natural but unrecognized disease process has been operating, which in about 80% of cases is some form of acute respiratory infection. If the true cause of death is to be revealed, it requires at least a gross post-mortem examination and, in addition, careful microscopic examination of all the main organs. In addition, the following laboratory examinations are helpful in many cases: a blood culture, a complete blood count and a blood sugar examination made as close to death as possible. If not obtained prior to death, a blood culture and a lumbar puncture done post-mortem should reveal valuable information.

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METRAZOL—ITS PLACE IN GERIATRIC THERAPY

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Metrazol, an old and well-established analeptic, was found to be beneficial in improving the appetites, blood picture and general condition of a group of geriatric patients.

The problem of loss of appetite in the aged is a serious one even with those who are able to maintain themselves in their own home surroundings. At home this lack of appetite can be overcome partially by serving dishes which are known to be tempting to the individual. In a large institution, however, this is not practical from either a culinary or management viewpoint. The results obtained by coaxing with dietary tidbits as well as with various medicinal or physical therapeutic measures have been meager and temporary. Thus, when it was suggested that Metrazol® might give the patient a "lift" and overcome his anorexia, investigation was warranted.

Metrazol® exerts its effect by stimulating the higher medullary centers: respiratory, circulatory and vagal, although all parts of the cerebrospinal axis are affected to some degree.[1] The action of Metrazol® is most marked when the centers are depressed.

The drug is very stable, practically nontoxic and non-cumulative. It is extremely soluble and rapidly absorbed after oral or parenteral administration.

Recent literature[2,3,4] indicates that Metrazol® in oral doses of 0.1 to 0.3 Gm. (gr. 1½ to 4½) four times a day has little risk, and shows promise of overcoming the fatigue and apathy, as well as the disorientation, of senility. The literature suggested that this effect of Metrazol® was the result of increased nerve impulse transmission.[5] The stimulation of the respiratory and circulatory centers may reduce anoxia, improve circulation and thus overcome anorexia.

It is the purpose of this paper to report our clinical experience in twenty cases in which Metrazol® was used for a consecutive period of not less than three months. In the light of our findings our present report must be considered only preliminary.

In all of our twenty cases anorexia was present plus at least two of the following complicating complaints: apathy, apprehension, disorientation, or fatigue.

The usual rules for random sampling could not be followed because it was felt that the sample should comprise those cases showing the greatest morbidity and portraying anorexia with two or more of the other symptoms. The following factors also demanded consideration: (1) The mean age of the 225 patients in this institution, a chronic disease sanitarium, was 78 years. The age of the youngest was 24, the oldest 99. Naturally in such a group the life expectancy is short and the mortality rather high. (2) Nearly 80 per cent of the patients were on disability assistance or were clients of welfare agencies. Moreover, an arrangement was in effect between the institution and these agencies that when one of their clients had so improved in health as to be able to reside in a less expensive boarding house, the patient would be discharged to this form of care. This led to a large turnover, leaving great uncertainty as to whether the group chosen as a sample for testing would be present in sufficient numbers at the end of the designated period of study.

To overcome this, it was decided to make the standard for each patient a test period of three months' duration. Treatment was to be continuous until a total of twenty patients had each completed a three months' trial on Metrazol®. Any patient that for one reason or another manifested toxic effects as a result of Metrazol® was considered a failure. The control was the rest of the census, those without the prerequisite symptom syndrome, since they

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had been admitted with the same range of clinical diagnoses.§

Altering factors such as change of weather, institutional dietary variations, other routine treatments, etc., were not evaluated as they held for all the patients in the institution and not for this group alone. Likewise the clinical diagnosis was not considered in the choice of the cases which were to undergo Metrazol®§ therapy. In all cases more than one diagnostic condition was present.

During the course of the investigation twelve patients were discharged, seven by virtue of sufficient improvement so that they could be cared for in boarding houses or at home. Five expired; two of these were suffering from terminal cancers when admitted to the sanitarium while the other three had disabilities of the cardiovascular and cerebrovascular type.

The percentage of discharges through death during the whole test period was no greater than that current in the entire census of the institution, 5 out of 32 starts or 15.62 per cent as against 51 out of the 225 (new admissions being considered as patients who filled the quota of 225) or 22.66 per cent. The number of improved discharges, either to their own homes or to other placements, was 21.9 per cent or 7 out of 32 for the patients under study at any time, as against 18.12 per cent or 42 out of the 225.

Before the study was begun, a complete preliminary physical examination was made. In all cases a complete blood count and urinalysis were done, blood pressure was recorded, but except for a Mazzini test—negative in all cases—no other laboratory studies were called for.

The initial and maintenance dose was 0.2 Gm. (gr. 3) (2 tablets) of Metrazol® four times a day. This dose was increased by 1 tablet four times a day in all cases in which there was no symptomatic improvement during the first month (6 in all). In three cases which gave no apparent initial response the increased dose produced a favorable reaction which thereafter equalled that obtained in the other responding cases. The other three were those who did not at any time show significant benefits as a result of therapy.

In the twenty patients completing the study, even where there was no response whatsoever in symptoms, the laboratory picture nearly always improved (see table). In all but two cases appetite improved. In 10 of the eleven disoriented patients disorientation disappeared completely or almost so. Four patients became rational. The one exception, Number 11, was one of three in which Metrazol® failed to evoke a favorable response except in the blood picture. Two cases (8 and 9) showed no improvement mentally but in one the appetite improved slightly. But even in these cases the laboratory tests gave evidence of significant beneficial alteration. Several cases with aphasia showed definite speech improvement. Incontinence which was originally more or less present in all of these patients improved or disappeared, while the two patients most severely affected by incontinence regained both bladder and bowel control.

At the end of the first month a repeat examination of the blood showed changes which to our knowledge have not been previously reported. Initially nine of these patients, as was to be expected in this age group, showed a marked degree of anemia while four others had less severe alterations of the blood count and hemoglobin. In the majority of our patients, including even those who showed no symptomatic benefit, there was a significant improvement in the red cell count and hemoglobin (see table) during the first month. The white blood count also increased. At the end of the second month there was a slight average drop. The blood picture thereafter remained fixed at approximately this new level. The composite red blood cell count of twenty patients, which for the first month was 3,818,000 was 4,172,500 at the end of the third month. The hemoglobin which at the beginning of treatment was 75 per cent was 80 per cent at the end of the third month. The mean of the number of white blood cells at the beginning of the treatment was 8,260 and at the end of the

§ The gamut of clinical diagnoses with which our patients were admitted ran in the following order of frequency:

(1). Cerebral vascular accidents and their residual effects—as hemiplegia, paraplegia. (2) Arteriosclerosis. (3) Cardiac disease. (4). Carcinoma. (5). Diabetes. (6). Hypertension. (7). Cord diseases or injuries. (8). Arthritis. (9). Parkinson's disease. (10). Senility. (11). Fractures. (12). A few semi-acute or post-operative convalescent patients.

TABLE

Case	Anorexia Before Treatment	Anorexia After Treatment	Apprehension Before Treatment	Apprehension After Treatment	Disorientation Before Treatment	Disorientation After Treatment	Fatigue Before Treatment	Fatigue After Treatment	Apathy Before Treatment	Apathy After Treatment	Bedridden Before Treatment	Bedridden After Treatment	Hemoglobin Before Treatment	Hemoglobin After Treatment	Changes Following Therapy
1	3+	0	3+	0	1+	1+	3+	±	1+	0	Partially	Greatly improved	75%	82%	Lethargy and weeping disappeared.
2	3+	±	3+	±	3+	0	3+	0	4+	1+	Totally	Out of bed	82%	90%	Incontinence and cloudy sensorium disappeared.
3	3+	±	3+	±	3+	0	3+	0	3+	1+	Totally	Out of bed	74%	76%	Marked malnutrition and moroseness corrected.
4	3+	±	0	0	3+	±	0	0	3+	0	Not		85%	86%	Became cheerful and talkative.
5	4+	0	0	0	1+	±	3+	0	4+	0	Totally	Out of bed	63%	70%	Reversal of rapid decline before treatment.
6	3+	±	0	0	1+	±	0	0	3+	0	Not		60%	67%	Blind.
7	3+	0	0	0	1+	±	3+	0	3+	0	Mostly	Out of bed	83%	85%	Much more alert.
8	3+	1+	3+	3+	0	0	3+	3+	4+	4+	Totally	Totally	76%	82%	No change except improved appetite.
9	4+	0	3+	3+	0	0	3+	3+	4+	4+	Totally	Totally	77%	94%	No change in mental status.
10	3+	±	4+	0	3+	0	0	0	4+	0	Totally	Totally	83%	82%	Improved continence of bowel and bladder; became more cheerful.
11	4+	0	4+	4+	4+	4+	0	0	4+	4+	Totally	Totally	60%	75%	Incontinence remained after treatment.
12	3+	0	4+	0	1+	±	0	0	1+	±	Totally	Totally	72%	76%	Became more cheerful.
13	4+	0	4+	0	4+	0	4+	0	4+	2+	Totally	Out of bed	90%	76%	Cancer of prostate; became rational and interested.
14	4+	±	0	0	1+	±	1+	1+	4+	0	Increasingly	Tendency aborted	91%	82%	More active.
15	3+	1+	4+	±	4+	0	0	0	3+	1+	Not		60%	82%	Physically improved; no change in disorientation.
16	3+	0	0	0	1+	±	3+	2+	4+	1+	Increasingly	Reversal of trend	72%	78%	Marked reduction in Parkinsonian tremor.
17	4+	0	4+	±	4+	0	4+	0	4+	0	Totally	Totally	73%	78%	Improvement in speech and mental status.
18	4+	0	4+	±	4+	0	0	0	4+	1+	Totally	Out of bed	80%	84%	Improvement in speech; became rational.
19	4+	0	4+	0	4+	0	1+	0	4+	0	Not		60%	78%	Improvement in bladder control and general status.
20	4+	0	4+	0	4+	±	4+	1+	4+	1+	Totally	Out of bed	76%	76%	Loss of extreme fear.

Symptoms reported 1 to 4+

0 Indicates absence of symptom.

± indicates good response with occasional relapse.

third month 9,150. The cause behind this improved hematologic picture has not been fully determined by us. It may be explained on the basis of improved appetite leading to a greater ingestion and assimilation of the institution diet, which consisted of a very high protein content, much of it in the form of meat products. Blood studies of the entire remaining census of the institution showed no such blood changes on the same diet.

The composite blood pressure of the twenty cases showed a marked drop of both systolic and diastolic pressure with the greatest drop being present in the systolic, thus bringing the pulse pressure down considerably. This drop was present even where the initial blood pressure was already low. Here the drop was comparatively small. The composite blood pressure picture was 141/77 at the beginning of treatment and 124/68 at its end.

Three typical cases of the successful use of Metrazol ® are presented.

CASE REPORTS

No. 1. An 86-year old woman was admitted with myocarditis, mitral regurgitation, marked osteoarthritis and deformity of her joints, especially of both ankles. She was bedridden, and very apprehensive. A lethargic state alternated with crying spells and a habitual refusal of food. The red cell count was 3,510,000, white cell count 6,150 per cu. mm., hemoglobin 75 per cent at the start of treatment. At the end of ninety days the red cells totaled 4,250,000, white cells 6,450, hemoglobin 82 per cent. The blood pressure was originally 138/70; it was 120/65 at the conclusion of Metrazol ® therapy. The patient now was very much interested in her food, and requested additional feedings. She was alert and out of bed helping other patients, despite the ankle deformity. We believe, but cannot prove, that the relief of the cerebral anoxia by Metrazol ® was the underlying cause for her increased sense of well-being.

No. 16. A man, aged 72, had had a marked Parkinson syndrome for years, as well as arthritis and arteriosclerosis. He had no appetite, was very apprehensive and apathetic. For several months he had refused to get out of bed. His red cell count was 3,200,000, white cell count 10,000, hemoglobin 72 per cent. He had been demanding barbiturates every night because of insomnia. A standing order for these sedatives was discontinued before the end of the first month of treatment with Metrazol ®, because he now was asleep before sedative medication was distributed. Under Metrazol ® treatment the tremor diminished so markedly that the patient was once again able to help himself. His appetite actually became good and apprehension was lost completely. He became definitely more alert and interested in his surroundings. At the end of three months, the red cell count was 3,970,000, while the white blood count, which had dropped to 8,050, was up again at 11,850. The hemoglobin now was 78 per cent. The blood pressure, 138/85 at the beginning, had changed little and after three months was 130/80.* *

No. 17. A man 70 years of age with cardiovascular disease, cerebral arteriosclerosis and myocarditis had had a cerebral hemorrhage with a right hemiplegia. There was a history of cardiac decompensation, but this did not manifest itself during his stay here. The nurse's report reads: "Poor appetite, bedridden, no inertia, complete lack of interest, sleeps all the time, disoriented when awake, speech is jumbled, has to be fed." His blood picture was comparatively good, red cell count 3,950,000, white cell count 8,550, hemoglobin 73 per cent. From the very inception of the study he improved rapidly, and at the end of three months his speech was clear, he was alert, sat out of bed daily, fed himself, demanded more food, finished his meals, and was no longer disoriented. His red cell count had risen to 4,130,000, the white cell count was now 7,600 and the hemoglobin 78 per cent. The blood pressure, originally 130/70, was now 120/70.

COMMENTS AND SUMMARY

It is recognized and admitted that the conditioning factors prevailing in this study put a decided strain on the percentage figures we obtained. We are the first to admit the hazard in attempting to evaluate the efficiency of the drug in view of the circumstances which made it impossible to keep all the involved factors constant. However, all these patients had been under our care and observation for months before the study was undertaken. They had each had numerous changes in medications. None of these previous forms of treatment had had any consistent effects on the symptoms presented by these individuals. All of them were on the down grade with evidence of progressive deterioration and all had been considered failures as far as our ability to influence the disease picture was concerned. The euphoria which was seen in such a large percentage of our cases under Metrazol ® therapy could not therefore be considered solely a psychologic effect.

It must be emphasized that the drug was well tolerated by all our patients and no de-

* * Since previous studies with Metrazol® in Parkinson's disease have shown no change in tremor, gait or speech, one may raise the question in this case if there may not be a predilection for Metrazol ® to combine synergestically with the belladonna-like, or mephenesin medications used in this case.

leterious effects were observed. Since seven of the thirty-two patients started on Metrazol ® were improved to such a degree that they could be cared for in appropriate boarding houses or even at home, while nearly all of the twenty who completed the three month course were improved in one way or another, it is our opinion that Metrazol ® showed enough promise in its beneficial effects in this small series of cases to warrant further exploration with a larger similar group. In such a study only Metrazol ® should be used and all other medications discontinued except those necessary to continue life, e.g., digitalis or mercurial diuretics in a decompensating heart, antibiotics for infections, etc. We feel that further laboratory work should be undertaken to determine if the improvement in the blood picture is the direct result of the pharmacodynamic action of the drug upon the blood forming organs and if the improvement of the anorexia is a primary or secondary benefit concomitant with, and dependent on the action of the Metrazol ®. There is reason to believe that several forms of treatment given concurrently during the present investigation might readily have been discontinued with no untoward effect. This too should be determined by further study.

Pinehaven Sanitarium

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HYALURONIDASE IN HEMARTHROSIS

Hempohilia, a rare blood disorder, can produce extreme disability when it is accompanied by hemorrhage into the joints. The pain and limitation of motion due to acute hemarthrosis are often followed by chronic deformity through capsular thickening, contractures, periarticular fibrosis and secondary arthritis. Eventually there will be ankylosis and crippling joint changes. The use of hyaluronidase has recently been investigated for the treatment of acute hemophilic hemarthrosis.†

Hyaluronidase is an enzyme that acts directly on the ground substance normally present in intercellular substrate. By depolarizing hyaluronic acid, natural barriers are broken down, allowing a freer flow of fluid through the intercellular space. Hyaluronidase also acts on the hyaluronic acid that constitutes the major component of synovial fluid, and reduces its viscosity. This permits a greatly accelerated dispersion of joint fluid.

In treating hemophilic hemarthrosis, the affected joint is first aspirated aseptically, removing as much bloody fluid as possible. With the needle still in place, 1000 turbidity-reducing units, mixed with one per cent procaine, are instilled into the joint. For the major joints, four to five centimeters of solution usually suffice. No attempt is made to move the joint for 24 hours. At the end of that time, the dressing is removed and the joint evaluated for residual distention, pain, and mobility. If significant signs and symptoms persist, the treatment is repeated. At the end of the second 24-hour period the patient is permitted to go home, and is encouraged to use the joint fully. In thirteen cases of hemophilic hemarthrosis treated in this manner, there were but two failures, one of which was successfully retreated. There were no toxic reactions to hyaluronidase itself. This method of management has marked superiority over previous, more conservative measures.

† MacAusland, W. R., Jr., and Gartland, J. J.: The Treatment of Acute Hemophilic Hemarthrosis—A Report on the Use of Hyaluronidase. New Eng. J. Med. 247:755, November 13, 1952.

PREVENTION OF TRANSFUSION REACTIONS BY INTRAVENOUS CHLOR-TRIMETON MALEATE *

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This preliminary report proposes the addition of Chlor-Trimeton® directly to whole blood transfusions to prevent non-hemolytic transfusion reactions. In a carefully controlled study, the reaction incidence was reduced to one tenth of its previous rate by this method.

Few things in medicine are quite as alarming to the patient or the observer as chills, giant urticaria, diffuse pain or high fever, the signs of a transfusion reaction. Many procedures have been evolved since the introduction of indirect transfusion to combat such reactions. Foremost have been improved technics for typing and crossmatching to prevent hemolytic reactions; these are not considered here. The use of disposable plastic tubing and disposable vacuum container bottles did away with the minute amount of blood retained in the re-washed rubber tubing, which was so frequently the cause of reactions. Screening of donors with regard to specific infectious disease, and the custom of fasting prior to the blood donation have gone a long way to avoiding reactions.

Unfortunately, even with these carefully controlled measures, the incidence of reactions continues to range from 5 to more than 10%.[1] These are almost all classified as either allergic or pyrogenic, depending on the occurrence of urticaria and/or chills. In warm climates, hemolysis caused by refrigeration difficulties and the associated increase in breakdown products of blood may result in a higher reaction incidence. Urticaria and angioneurotic edema have been attributed to the release of free histamine within the body following allergic phenomena.[2] What has been more controversial and less understood is the so-called pyrogenic reaction, in which a chill heralds the onset followed by varying degrees of pyrexia. Numerically in the literature this is the most common form of transfusion reaction.[1] There is strong evidence that the patient benefits very little from a transfusion accompanied by an allergic or pyrogenic reaction.

The problem, therefore, has been to find means to prevent both types of reactions. In our experience, with a recent annual average transfusion rate of approximately 3,000 units, the reaction rate is about 6%. In an effort to combat these unfortunate reactions about two years ago the use of antihistamines by mouth was tried. Whether given before the transfusion began, or after the reaction set in, the results were poor. In March 1952, data appeared indicating the effectiveness of 25 mg. of an antihistamine added directly to each of 607 pints of blood used in a general hospital.[3] The incidence of either allergic or pyrogenic reactions was cut to 0.32% from the control series of 7.16%. Unfortunately this publication, although making very important observations with regard to the effectiveness of antihistamine in preventing transfusion reactions, made no mention of the presence or absence of side reactions to the drug itself, or the effect upon the blood in vitro.

METHODS

Our studies began with the demonstration of non-toxicity of Chlor-Trimeton® for whole stored blood under usual blood bank conditions. Eleven pints of blood, drawn into Cutter Vacuum® flasks containing 130 cc. of A.C.D. solution were utilized in the following manner: three units were used as controls, merely being stored without introduction of Chlor-Trimeton®; four units were inoculated with 20 mg. of Chlor-Trimeton® at the time of collection; one unit was inoculated with 50 mg. The bottles of blood were sampled at 48 hour intervals for hematologic studies. These consisted of noting the appearance, presence of hemolysis, prothrombin time, sedi-

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mentation rate, hemoglobin, red blood cell and white blood cell counts, platelet count, and blood smear studies. No significant differences between the blood stored with Chlor-Trimeton ® and the control bloods were found. The studies were continued for a period of 21 days to establish the prolonged non-toxicity of Chlor-Trimeton ® upon stored blood. Since this in vitro data demonstrated the innocuousness of Chlor-Trimeton,® the prevention of transfusion reactions in vivo by introducing Chlor-Trimeton ® directly into the transfused blood was investigated. Knowing the high potency of Chlor-Trimeton® relative to other antihistamines 10 mg. was estimated as an adequate dose for this purpose.[4,6] The very high safety factor of this procedure is evident from the literature, which has noted non-toxicity in single doses of Chlor-Trimeton® as high as 20 mg.

The Chlor-Trimeton ® was instilled directly into the blood via an 18 gauge needle with two gentle inversions of the bottle at the time the floor nurse came to the laboratory for the blood. In many instances, however, the blood would be returned unused for a variety of reasons and would then be stored in the refrigerator up to as many as ten days before its re-use.

RESULTS

To date 300 transfusions have been given with 10 mg. of Chlor-Trimeton,® in the following situations: patients in shock; patients receiving up to seven units of blood, the largest amount in any 24 hour period being four units, containing a total of 40 mg. of Chlor-Trimeton;® patients with a definite history of allergy; patients who have had allergic or pyrogenic reactions to transfusions on previous occasions; cases of pelvic pathology, post-natal bleeding and leukemia, these groups being rated high in term of probable transfusion reactions; patients who had reacted to a pint of blood given without Chlor-Trimeton®, the same transfusion being capable of completion without a reaction after Chlor-Trimeton ® was added to the remaining blood. Not one case of urticaria occurred in the entire group of subjects given 10 mg. of Chlor-Trimeton® with their transfusions. There were two reactions, consisting of chills, that did occur in this series of 300 transfusions. In one of these, the pint of non-medicated blood had been discontinued because of a severe chill, but it was begun again after only 10 mg. of Chlor-Trimeton ® had been added. It is our opinion that a larger dose of Chlor-Trimeton ® might have prevented the recurrence of the chill which followed the second phase of the attempted transfusion. The second reaction occurred in a 77-year old female patient with a gastric malignancy who had reacted with chills and fever to several previous transfusions given without Chlor-Trimeton.® Of equal importance to the prevention of the transfusion reaction was the extremely low incidence of side reactions. Although drowsiness is a difficult finding to evaluate in many sick or toxic patients, one patient exhibited a mild drowsiness for one hour following the transfusion. No other side reactions were noted in our series. This is borne out in the literature by various workers who give Chlor-Trimeton ® credit for noteworthy lack of side effects.[5,6] It can be concluded therefore, that the use of 10 mg. of Chlor-Trimeton ® intravenously, when added to the usual 500 cc. unit of blood being transfused, is a safe and non-toxic procedure. The efficiency of this procedure is proved beyond doubt in this series by finding no allergic reactions and less than 1% pyrogenic reactions in a group of 300 varied and totally unselected cases. (Table 1.)

A control series of 350 patients receiving transfusions without benefit of Chlor-Trimeton ® gave a clear cut indication of the value of this procedure in the test group (Table 1.) The controls manifested 22 reactions, or 6.3% of the 350 transfusions administered. Of the reactions, 10 were listed as chills of varying severity, 7 as urticaria, 4 as a combination of chills and urticaria, and one as dyspnea and chest pain.

COMMENT

The use of antihistamines to prevent the various reactions associated with introduction of foreign protein, whether by transfusion or other routes is based on a well accepted physiologic principle.[7,8] As stated above such reac-

TABLE I

STATISTICAL SUMMARY OF CASES RECEIVING CHLOR-TRIMETON® AND CONTROLS

	Number of Cases	Total Reactions	Chills and Fever	Urticaria	Combination of Chills, Fever and Urticaria	Dyspnea
Controls	350	22 (6.3%)	10 (2.9%)	7 (2.0%)	4 (1.1%)	1 (0.2%)
Chlor-Trimeton® Added to Blood	300	2 (0.6%)	2 (0.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Differences are statistically significant: $P = 0.05$ [10]

tions are considered due to the release of histamine following the introduction of such sensitizing protein. An attempt was made during the past two years to combat allergic and pyrogenic reactions by the use of antihistamines, orally or sub-cutaneously. The results were quite poor. Trial was made of various preparations either before the transfusion began, while the blood was running in, or after a reaction had set in. The results were highly inconclusive. With the subcutaneous preparations dosages up to 40 mg. of various antihistamines were employed. The results were variable in terms of amelioration of reactions, with very little effect when employed as preventive therapy. Early in 1952 a series of cases was presented proposing the greater effectiveness of Chlor-Trimeton® by oral or sub-cutaneous route.[9] This author was able to re-use blood that had given a reaction by administering Chlor-Trimeton® to the patient. However, the picture here was still not one of ease of administration and consistent results which are desirable for transfusion work. Following this presentation the work of Ferris [3] appeared, suggesting the direct introduction of antihistamine into the transfused blood.

SUMMARY

1. In a random, unselected group of 300 transfusions in a large general hospital employing usual blood banking technics, 10 mg. of Chlor-Trimeton Maleate® were introduced directly into the blood prior to infusion. Not one case of urticaria occurred. Two cases of chills occurred in this group, giving a reaction rate of 0.6%.[2]

2. In a control series of 350 cases, 6.3% of the transfusions elicited either pyrogenic, allergic, or both types of reactions.

3. The ony side reaction observed was a single instance of mild drowsiness following the use of Chlor-Trimeton®.[4]

4. This procedure, therefore, is recommended as a routine procedure in blood transfusions.

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THE METABOLIC CONSEQUENCES OF TRAUMA*

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A scholarly dissertation on the metabolic consequences of trauma and major surgery is presented. The conclusions reached are of practical importance in the management of such patients and may spell the difference between success and failure.

Concepts of the metabolic aberrations that occur following trauma, accidental or surgical, have been fraught with much notion and emotion. Should the metabolic changes be looked upon as physiologic phenomena favorable to the recovery of the patient; or do the changes represent pathologic physiology requiring therapeutic administration of solutions and hormones calculated to return the metabolic state to a condition we consider "normal"? This enigma has resulted in much debate and differing opinions as to what is the most favorable course to be followed.

I would like first to present some confusing issues. Following trauma, the renal tubules avidly reabsorb sodium and to a lesser extent chloride, resulting in a strongly positive sodium balance which has been termed post-operative salt intolerance. Paradoxically, the plasma sodium concentration falls during the phase of positive sodium balance and frequently rises later during the subsequent sodium diuresis. This "sodium paradox" has been interpreted as being due to a shift of sodium to the intracellular compartment with a consequent decline in plasma values. Later as sodium diuresis occurs, a shift of this ion from the cells results in a transient rise in plasma sodium concentration. Some have explained the sodium paradox by transfer of water out of the cells with dilution of extracellular water and consequent relative fall in concentration of plasma sodium. Others have said that activity of water retaining hormone of the posterior pituitary may result in tubular reabsorption of water and hence, dilution of extracellular water and relative fall in plasma sodium. The only definite conclusion to be drawn here is that we should never be guilty of treating the plasma sodium concentration as such but should treat the patient.

After trauma there occurs a loss of potassium in the urine on the first day which is quite dramatic. This loss is progressively less on subsequent days. Strangely, the lowest excretion rates of potassium occur post-operatively at the very time that dietary potassium intake is again being increased. Following trauma a negative nitrogen balance results. Usually this is a result of absent intake of nitrogen with continuing urinary losses. Less frequently negative nitrogen balance occurs because of both lack of intake and an actual increase in the rate of nitrogen excretion over previous pre-trauma rates of excretion.

Until about 18 months ago endocrinologists felt that this negative nitrogen balance was accompanied by nutritional failure of the patient. If one considers the negative nitrogen balance alone it seems sensible to repair it, stop it and return the nitrogen to the body. This led to the idea of using testosterone in the treatment of traumatized patients. Testosterone is in part an anabolic hormone favoring the restoration of nitrogen primarily in skeletal muscle. Since the patient lying in bed may well sacrifice muscle protein to heal wounds, this seemed a good therapeutic procedure in that it prompted nitrogen loading. This therapy however, treats only one phase of the altered metabolism, namely the negative nitrogen balance. It is the total patient we want to treat and not his negative nitrogen balance. It is like the twelve year old boy watching a ball game through a knothole. He sees third base and left field very well but his conclusions regarding the whole game and who won may be highly erroneous.

Along came corticotrophin (ACTH) and

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cortisone; these hormones augment not only the excretion of nitrogen but potassium as well. These hormones were enthusiastically used in patients subjected to trauma and burns, though the endocrine consequences were directly opposite to the influences of testosterone. Such therapy was carried out before we knew what was fundamentally going on. We need to know just what the body is up to in sacrificing nitrogen before we either urge it on or make efforts to stop the nitrogen loss.

All this is admittedly confusing. However, a concept of the metabolic changes following trauma has evolved in the past few years which seeks to tie together the loose ends and bring the scattered bits of information under one roof. We can more nearly see the total picture and cease "looking through a knothole."

A regularly and predictably occurring pattern of metabolic response to trauma has been determined.[1] The metabolic changes may be influenced by: a) the severity of the injury; b) the state of compensatory reserve consequent to previous illness or trauma; c) the responsiveness, both immediate and sustained, of the patient's adrenal cortex; and d) the magnitude of extra-renal losses of water, electrolyte and nitrogen before, during and after trauma. (See Tables II., IV., and VI.) The pattern of metabolism to be described may seem to differ from patient to patient but the difference is only one of the depth of metabolic change or in duration. I recently came across a statement made by Sir John Hunter in 1794. "There is a circumstance attending accidental injury which does not belong to the disease—namely, that the injury done has in all circumstances a tendency to produce the disposition and the means of cure." It would seem that this very astute observer was aware of the metabolism of trauma as a general picture if not the details. And we are still on the trail of the details.

The metabolic behavior pattern following trauma has evolved through studies employing the metabolic balance technic. There is no end to the substances in the body known to respond by decreases or increases following severe illness or trauma. The four most studied substances are water, sodium, potassium and nitrogen. These are the most metabolically active and the most predictable in their behavior. Their alterations are also the most closely correlated with the clinical picture and the most usable to the physician looking after the patient.

Balance technic consists in the measurement of the total intake of certain chemical substances entering the reservoir of the body by all routes and the measurement of the output of these chemical substances by all routes. Nitrogen, potassium,(the principal intracellular electrolyte) sodium (the principal extracellular electrolyte) and water seem to cast the most light on processes going on in the patient's body. There is metabolic equilibrium when the patient loses by one route or another exactly the same amount as he has taken in. The balance is positive when more is taken in than is lost and negative when more is lost than taken in. The measurement of the output is where metabolic balance studies fall short. Intake can be measured accurately by the use of tables of fluid, electrolyte and nitrogen values and careful attention to intake measurement. Studies of the metabolic consequences of trauma have been fruitful enough to allow the formulation of a number of predictable metabolic constants. Thus we have concepts for clinical application at the bedside. If we have a concept of the metabolic response of the body to a given situation, we can predict what will happen to substances entering the body under various circumstances.

It is helpful to consider the ratio of potassium to nitrogen in the balance. Normally we can assume a ratio of 2.5 to 3.5 m Eq. of potassium per gram of nitrogen as the value for lean muscle tissue.[2] Only rarely is there any distortion of this ratio in favor of nitrogen but very commonly we see relatively more potassium than nitrogen being lost or gained. This may be interpreted as meaning that intracellular electrolyte is moving faster than protoplasmic protein out of or into the body as the case may be. The potassium/nitrogen ratio is undoubtedly influenced by the potassium/nitrogen ratio of the intake. Most diets have a high K/N ratio due to the vegetables and fruits which contain much more potassium than ni-

trogen; muscle or meat has the "normal" K/N ratio. Should a person on a normal diet suddenly stop eating, his urine on the first day will have a K/N ratio of 5 m Eq. per gram as he excretes the excess potassium in his diet.

The concept of nitrogen balance proposes that a person in positive balance is synthesizing cellular protein at a rate proportional to his nitrogen retention; or if he is in negative nitrogen balance, that cellular protein is being broken down. Two notable exceptions are: a) the patient with chronic renal disease or acute renal insufficiency who is simply unable to excrete nitrogen normally, and b) the patient receiving intravenous whole protein such as plasma or albumin, the nitrogen of which will be only slowly metabolized.[1] In these situations, positive nitrogen balance cannot be accorded the significance of tissue synthesis. In practically all other situations the weight of nitrogen retained is interpretable as being related directly to the weight of new protein synthesized.

Weight change in terms of balance is also an important concept. Pace and Rathbun[3] have given a figure for the ratio of weight of wet tissue per gram of nitrogen as being 32 grams of tissue per gram of nitrogen in the rabbit. Moore [1] has used on theoretical grounds a figure of 30 grams of wet tissue per gram of nitrogen. Thus, if a patient lost 50 grams of nitrogen one could calculate the weight loss accountable to nitrogen by multiplying 50 x 30 or 1500 grams (1.5 kilograms).

Sodium changes may indicate extracellular fluid losses although intracellular sodium shifts are confusing. Moore [1] has felt that this shift is great in significance and small in amount. To calculate the weight loss ascribable to sodium one may divide the sodium balance by the plasma sodium concentration. Thus if a patient has lost 420 m Eq. of sodium and his plasma sodium concentration is 140 m Eq./liter he has lost 3 liters or 3 kilograms of extracellular fluid. The fraction of weight change in the patient that remains in excess of that accountable by nitrogen and sodium will presumably be due to insensible losses and to the oxidation of body fat. Long term weight losses will include relatively more weight loss ascribable to oxidation of fat.

What we may conceive of as a normal pattern of response is divided into two phases, a catabolic phase and following this a spontaneous anabolic phase, and on to a good convalescence. The catabolic phase which follows immediately after the trauma is characterized by a decrease in the excretion of sodium and renal tubular conservation of sodium lasting for two to five days, (Table I.). A decrease in plasma sodium concentration occurs during this period of positive sodium balance or sodium loading. This is especially true if the trauma has been massive and is thought to be due to intracellular shift of the retained sodium. As the anabolic phase begins the second to the fifth day there occurs a sodium diuresis and the plasma sodium may now paradoxically rise as the ion shifts from intracellular to extracellular water. It is well to emphasize that this almost universal renal conservation of sodium in the surgical patient is usually associated with urine volumes of 500 to 1500 c.c. and a normal excretion of chloride ion. Therefore, it cannot be ascribed to reduced renal blood flow which would influence urinary volume and urine components proportionally. If shock occurs there is a decline in renal blood flow [4] but such a decrease in blood

TABLE I.

SODIUM BALANCE AFTER TRAUMA

NORMAL:	INTAKE 100 m Eq.	
	OUTPUT 100 m Eq. urine	
	BALANCE—Zero	
MODERATE OR SEVERE TRAUMA —		
1st to 3rd day—	INTAKE	Zero
	OUTPUT	20 m Eq. Urine (or less)
	BALANCE	Minus 20 m Eq.
1st to 3rd day—	INTAKE	100 m Eq. or more
If sodium given	OUTPUT	35 m Eq. or less
	BALANCE	Positive 70 m Eq. or more
SUBSEQUENT —	INTAKE	50-100 m Eq.
	OUTPUT	40- 80 m Eq. urine
	BALANCE	Zero minus 20 - 40 m Eq. during diuresis

This illustrates the behavior of sodium following moderate or severe trauma. (Adapted from Moore,[1] Winfield, Fox and Mersheimer [5] and Haynes, DeBakey and Denman [6])

flow is not capable of producing specific ion effects. Gross alterations in renal blood flow have not been shown to occur in major trauma unaccompanied by shock. The cause of renal sodium conservation seems now clearly to be a result of adrenal steroid influence on the renal tubule.

In the catabolic phase immediately following trauma there occurs an increase in the excretion of potassium for two to five days. This is most marked on the day of the trauma but at all times there is more potassium lost than that predicted on the basis of the nitrogen loss. The potassium/nitrogen ratio after trauma is normally high; 5 or more m Eq. of potassium are lost per gram of nitrogen, (Table III.). If the patient is depleted of water, nitrogen, sodium and potassium preoperatively the K/N ratio more nearly approximates tissue composition or 2.5 to 3.5 m Eq. K per gram of nitrogen. The depleted patient seems to conserve his potassium. As the patient enters the anabolic phase on the 2nd to the 5th day, the renal tubules conserve potassium and the patient's body loads this ion. In the anabolic phase of positive potassium balance the K/N ratio is likewise high in favor of potassium. There is usually no change in plasma potassium concentration in these phases of negative and positive potassium balance.

TABLE II.

EXTRA-RENAL SODIUM LOSSES

GASTRIC JUICE —
HIGH FREE ACID— 5- 25 m Eq. per liter
LOW FREE ACID—20-120 m Eq. per liter
BILE—130-165 m Eq. per liter
ILEOSTOMY—40-70 m Eq. per liter
MILLER-ABBOTT TUBE DRAINAGE — 80-130 m Eq. per liter
DIARRHEAL STOOLS—150-350 m Eq. per day
FORMED FECES—Less than 10 m Eq. per day

This table illustrates average sodium concentrations in fluids lost by other than renal channels. One may thus make estimates and obtain figures that are sufficiently accurate to allow of appropriate replacement. (Adapted from Moore[1] and Winfield *et al.*[5])

TABLE III.

POTASSIUM METABOLISM IN TRAUMA

NORMAL — INTAKE: 100 m Eq. per day
OUTPUT: 90 m Eq. per day urine
10 m Eq. per day feces
BALANCE: Zero

MODERATE TRAUMA —
1st to 2nd day—INTAKE: Zero
OUTPUT: 50 m Eq. urine
BALANCE: Minus 50 m Eq.
2nd to 4th day—INTAKE: 50-70 m Eq.
OUTPUT: 20-30 m Eq.
BALANCE: Plus 30-40 m Eq.

SEVERE TRAUMA—
Operative day—INTAKE: Zero
OUTPUT: 70-90 m Eq. — and thereafter as INTAKE increases to 50-70 m Eq., positive balance occurs about the 6th day.

This table illustrates the renal excretion of potassium following moderate and severe trauma. (Adapted from Moore[1] and Winfield *et al.*[5])

Long continued, slow potassium loss as in starvation only very slowly depletes body potassium and is usually associated with a normal plasma potassium concentration. In sharp contrast acute potassium losses, perhaps superimposed on starvation, commonly predispose to a low plasma potassium concentration. This is particularly true if alkalosis is present consequent to chloride loss as from vomiting or if the adrenal cortex is especially active and sustained following trauma. The plasma potassium levels may be very rapidly lowered if these three factors, acute potassium loss, chloride loss and alkalosis plus the stress response are operative in a depleted patient. This is the syndrome of hypopotassemic alkalosis characterized by asthenia, profound illness, fever, ileus and distension. Chemical findings are low plasma potassium, low plasma chloride, normal plasma sodium, high plasma CO_2 and high blood urea nitrogen. Patients who have pre-operative depletion are especially vulnerable to the development of this clinical and chemical syndrome. Sodium retention augments the tendency and thus the ill-advised post-operative administration of sodium may precipitate this syndrome.

Immediately following trauma there is a loss of nitrogen from the body for three to seven days during the catabolic phase, (Table V.). It is not so commonly appreciated that the excretion rate for nitrogen under usual circumstances does not change and that the negative balance is a result of continued output

TABLE IV.

EXTRA-RENAL POTASSIUM LOSSES

1. GASTRIC JUICE:
   HIGH FREE ACID—0.5-20.0 m Eq. per liter
   LOW FREE ACID—15.0-35.0 m Eq. per liter
2. BILE: 3.0-15.0 m Eq. per liter.
3. MILLER-ABBOTT TUBE DRAINAGE: 2.0-12 m Eq. per liter
4. ILEOSTOMY: 5.0-15.0 m Eq. per liter (more with ileostomy diarrhea)
5. DIARRHEAL STOOLS: 15.0-70.0 m Eq. per liter (Larger figure in diarrheal stools)
6. FORMED FECES: 10 m Eq. per day
7. PURULENT DISCHARGE: 10-40 m Eq. per day

This table shows the average potassium concentrations in fluids lost by other than renal channels. Thus appropriate replacements may be made by use of such values. (Adapted from Cooke and Crowley,[7] Moore [1] and Randall [8])

TABLE V.

NITROGEN METABOLISM

NORMAL—INTAKE: 12 gms.
OUTPUT: 11 gms. urine
1 gm. feces
BALANCE: Zero

MODERATE TRAUMA—

3- 5 days INTAKE: Zero
OUTPUT: 5-10 gms. urine
BALANCE: Minus 5-10 gms. daily

5- 8 days INTAKE: 8-10 gms.
OUTPUT: 6- 8 gms. urine
BALANCE: Plus 2-4 gms.

SEVERE TRAUMA —

5-10 days INTAKE: Zero
OUTPUT: 11-15 gms. urine
BALANCE: Minus 11-15 gms. daily

10-15 days INTAKE: 7-8 gms.
OUTPUT: 8 gms.
BALANCE: Negative or precariously positive

This table depicts the changes in nitrogen losses following moderate or severe trauma and may serve as a guide to predict nitrogen behavior. (Adapted from Moore [1])

following trauma with no intake of nitrogen. This is of the utmost importance. When intake is cut to zero after even fairly extensive trauma, a negative balance occurs with excretion rates that are the same and commonly less than those excretion rates seen in the same patient on higher intake pre-operatively or later in convalescence. However, when intake of nitrogen is cut to zero after massive injury or extensive thermal burn (over 25% of the body surface) a negative nitrogen balance occurs with excretion rates of nitrogen greater than those excretion rates on higher nitrogen intakes pre-operatively or later in convalescence.[1]

When nitrogen intake is kept at the pre-operative level following trauma either moderate or massive, a negative nitrogen balance occurs with excretion rates greater than those pre-operatively or later in convalescence, (Table VI).

TABLE VI.

EXTRA-RENAL NITROGEN LOSSES

FORMED FECES—0.5-1.2 gms. per day
UPPER G. I. CONTENTS—0.5-1.5 gms. per liter
ILEOSTOMY FECES—0.5-2.0 gms. per liter
DIARRHEAL STOOLS—2.0-6.0 gms per day
PURULENT DISCHARGE—0.7-1.4 gms. per day from open wounds
EXUDATE 3rd DEGREE BURN—3.3-5.2 gms. per day after 3rd week

This table shows approximate values for nitrogen losses by extra-renal channels. Thus estimate of losses may be made and appropriate and timely replacements carried out. (Adapted from Cuthbertson,[9] Darrow and Pratt [10] and Moore [1]).

In cases in which the patient is depleted pre-operatively, the post-operative excretion rate may be very low and the negative balance small. Such a depleted response may be followed with a satisfactory recovery but in general depleted patients are more apt to develop post-operative wound or systemic complications.

During the catabolic phase of negative nitrogen balance the serum protein usually remains normal. The most common causes of lowered plasma protein concentration in surgical patients are: a) the too enthusiastic administration of salt and water with consequent dilution hypoproteinemia and b) the loss of plasma protein as such into burn exudates, edema fluid or ascitic fluid in advanced hepatic disease. Much of the data in hypoproteinemia in surgical patients comes from the era when saline was given routinely to post-operative patients. Starvation as such is not a potent cause of decrease in plasma protein if water and salt loading are not present. Advanced starvation is accompanied by salt retention and

hypoproteinemia may occur if the patient can take water.

This transient period of nitrogen loss is characteristic of the normal post-operative response whether or not oral intake is maintained. Intravenous protein hydrolysate is poorly utilized in the early post-operative period and does not alter this response, but may increase the nitrogen excretion rate. This fact should not discourage us from using oral food or hydrolysate therapy later in convalescence where starvation is produced by continued disease or complications. Supplementary nitrogen in this phase may be life saving.

There can now be no question that the ultimate achievement of positive nitrogen balance is an absolute prerequisite to complete recovery. Normally about the fourth to the seventh day the anabolic phase begins and is further characterized by retention of nitrogen and the onset of a positive nitrogen balance. This later becomes zero balance as convalescence is completed.

The transient negative nitrogen balance occurring in the catabolic phase is a normal and favorable response and is associated with a satisfactory convalescence. Wound healing may begin during the negative balance stage. A patient subjected to trauma, however, cannot recover and gain strength if he fails to go into anabolic positive balance later.[1]

The foregoing biochemical changes following trauma are normal and favor the recovery of the patient. It is a good thing and should not be crowded out of existence by forcing nitrogen at a time when it cannot be utilized and indeed seems to augment the excretion rate.[2] The potassium loss need not be replaced unless the patient is predepleted or is unable to carry out the catabolic phase followed by the anabolic phase. A normal catabolic phase is desirable but it must be followed by an anabolic phase or recovery will not occur. The most important functions we have in this regard are: a) the ability to estimate whether or not a given patient is able to carry out this metabolic picture following trauma; b) recognition of the proper time for interference with replacement solutions which requires a working knowledge of the metabolic occurrences following trauma. The body in its never-ending wisdom is accomplishing an excellent job in its own defense by carrying out this metabolic picture. We should think of the metabolism following trauma as being a good thing and tending to further recovery rather than conceiving of it as a detrimental occurrence to be altered in various ways.

Other manifestations, outlined by Moore, characterizing a normal metabolic response to trauma are: a) a transient decrease in urine excretion; b) transient elevation of temperature and pulse rate; c) a variable fall in circulating eosinophiles immediately following trauma. This persists for a few days and is followed by overshooting to levels above the pre-trauma eosinophile count; d) increase in excretion of steroid hormone products. e.g. 17 keto-steroids; e) a period of starvation and relative caloric deficit is normal and in some part a cause of the weight changes and balance changes. In five to seven days there is resumption of caloric and nitrogen intake and a positive balance is a vital prerequisite to normal convalescence; f) a loss of weight occurs greater than that accountable by the balance changes; this is due to fat oxidation and regained only much later in convalescence, (Table VII.).

TABLE VII.

NORMAL METABOLIC RESPONSE

1. A temporary decrease in urine excretion.
2. A temporary rise in pulse rate and temperature.
3. An abrupt decrease in urinary sodium and rise in total body sodium lasting 2 to 5 days, followed then by a sodium diuresis. Serum sodium concentration falls during positive sodium balance, especially if trauma is massive (sodium paradox).
4. An increase in potassium excretion for 2 to 5 days followed by potassium retention or K loading. No change in serum K at this time.
5. A loss of nitrogen for 3 to 7 days followed by nitrogen retention or nitrogen loading; later zero balance as convalescence proceeds. Serum protein levels do not change.
6. Drop in circulating eosinophiles and increased excretion of steroid hormone products. Evidence of activity adrenal cortical steroids.
7. Loss of weight greater than that accounted for by nitrogen, sodium and water changes; caused by fat oxidation to be regained much later in convalescence.

8. Period of starvation and caloric deficit. In 5-7 days caloric and nitrogen intake resumed and positive balance begin to occur; prerequisite to recovery.

9. The greater the magnitude of the disease or the trauma, the greater the depth and duration of the metabolic response.

This lists the components of a normal metabolic response to trauma as formulated by Moore.[1]

TABLE VIII.

ABNORMAL TYPES OF RESPONSE

1. EXCESSIVE RESPONSE DUE TO INORDINATE TRAUMA OR DISEASE —
   a) Prolonged and profound metabolic changes.
   b) Negative N & K balances continue after 7th day on resumption of intake.
   c) Sodium diuresis occurs late and is not striking.
2. DEPLETION RESPONSE —
   a) Patient with previous illness, trauma, starvation, etc.
   b) N & K negative balance minimal and Na loading not striking.
   c) Convalescence "sensitive."
   d) More apt to develop complications, edema and hypoproteinemia, phlebothrombosis or wound dehiscence.
3. HYPOADRENAL RESPONSE —
   a) Patient with actual or transient adrenocortical insufficiency.
   b) Fails to maintain blood pressure despite blood replacement; oliguria and hypotension.
   c) Unregulated salt loss by kidneys and maintained high eosinophile count.
   f) Very poor trauma or disease tolerance.
4. EXTRA-RENAL RESPONSE —
   a) Losses occurring by other than renal channels, e.g. diarrhea, fistulate, burns, etc.
   b) Losses of water, electrolyte, nitrogen and fat.

From Moore.[1]

Moore [1] has outlined certain abnormalities of response with which we must be familiar. See Table VIII. The first of these he has termed the excessive response which follows excessive trauma or extremely severe disease and constitutes a prolonged and deep metabolic change. Continuing negative potassium and nitrogen balances after resumed intake identify this type of response. An excessive response may occasionally follow moderate trauma in a depleted patient. The strict avoidance of shock and blood replacement quantitatively is helpful in avoiding this response. Recognition of it is important and this may be attained by knowledge of the circumstances under which it is most likely to occur and the careful following of the post-trauma course. Administration of large but appropriate amounts of nitrogen, electrolyte and calories is important here to permit resumption of positive balance at the earliest possible time.

A second type of abnormal response has been termed the depletion response which describes the patient previously depleted by starvation, illness or other trauma. This is characterized by a decrease in the manifestations of injury and lesser balance changes throughout. The patient is in a narrower balance and his convalescence is more precarious. He is more apt to develop such complications as thromboembolic disease, edema, hypoproteinemia with sodium retention and wound disruption. He utilizes a high intake earlier and more satisfactorily than the previously well-nourished patient. Such patients should be repleted where possible before trauma or surgery. Early feeding has its most urgent place here. Sodium administration in this type of patient is very apt to precipitate edema and hypoproteinemia. If chronic blood loss or acute infection is superimposed, a reduction in blood volume may follow which may not be apparent from plasma protein and hematocrit. Replacement is all the more urgent.

A third type of abnormal response is termed the hypoadrenal response. By this is meant that the patient has actual anatomic or function adrenocortical insufficiency. It is characterized by failure to maintain blood pressure despite adequate blood replacement; unregullated renal excretion of sodium; oliguria caused by decreased blood pressure and a fall in filtration pressure and marked intolerance to any trauma or infection. It is probable that nitrogen and potassium losses are less than with the normal response. Laboratory recognition is obtained by a sustained high eosinophile count following trauma; inordinate urinary sodium losses: low excretion of adrenal

steroid products and favorable response to cortisone or ACTH. If trauma has been excessive and there is no reason to suspect endocrine disease, it is most likely that the patient's adrenal cortex is receiving maximum stimulation from his own pituitary gland. Hence, it seems more rational to use cortisone first, perhaps later shifting over to ACTH gradually in decreasing doses to avoid undue endogenous ACTH suppression.

The fourth abnormality of response formulated by Moore [1] is termed the extrarenal response. This refers to the patient who has previously lost water, electrolyte and protein through channels other than renal. These may be by diarrhea, vomiting, fistulae, burn transudate or purulent exudate. Here we must know or approximate the amounts and concentrations of losses and provide them once they become utilizable. Such losses may precede the trauma or accompany and follow it. One must recognize and treat, if indicated, the type of response occurring. (See Tables II, IV, VI and VIII.).

Benedict [11] in 1915 carried out a most instructive study in starvation in which nitrogen, potassium, sodium and water were particularly studied. A man was given only an intake of distilled water for 30 days. These studies have been recently repeated with pertinent additions to the method by Moore and his group.[1] The bodily changes occurring in starvation have been compared to those following trauma in very severe illness. As starvation is begun the nitrogen loss rate attains a value of about 10 grams daily which settles to a rate of 7 grams daily after the first 12 days. These rates of nitrogen loss are very close to the same nitrogen loss rates seen in patients following trauma who are on zero intake. Where massive trauma has occurred this excretion rate of nitrogen may increase. It should be emphasized here that the nitrogen excretion rate in starvation is not so large as that often observed in a full diet at rest. This is in accord with the observation that nitrogen excretion rates immediately after trauma or severe disease are much more elevated when intake is maintained than when it is not.

The simple starvation pattern of potassium metabolism is that of gradual loss decreasing after the first few days to 20-30 m Eq. per day. The K/N ratio remains normal or 3 m Eq. per gram of nitrogen for the first 3 days and then falls to 1.5 to 2.0 m Eq. per gram of nitrogen. These mild potassium losses are much less than those one sees on the day of trauma in a surgical patient. The potassium losses of the starving man and those of the injured patient are in the same range after the first few days until the injured patient initiates the spontaneous anabolic phase and begins to load potassium.

A comparison of the sodium patterns of the starving man and the injured patient differ in that the former loses sodium in progressively decreasing amount. About the fourth day a mechanism of sodium conservation comes into striking activity and sodium losses are cut to practically zero. The starving man then continues to lose nitrogen and potassium indicating protoplasmic loss but conserves sodium and extracellular water. In all probability the sodium and extracellular water conservation reflect adrenocortical activity brought slowly into play. More recent studies bear this out by the observation of a decreasing eosinophile count occurring simultaneously. The sodium pattern of loss at first and then continued conservation in the starving man is the reverse of the injured patient's pattern. The injured patient shows marked conservation of sodium and later diuresis.

These comparisons of starvation and trauma metabolic patterns are useful in clinical management. The patient subjected to trauma has the combination frequently of acute starvation or near starvation and the added stimulus to his metabolic defense mechanisms of sudden trauma. Following trauma intracellular substances, potassium and nitrogen are mobilized, an 11-oxysteroid or cortisone-like effect. Extracellular substances, e.g. sodium, are conserved to support and maintain the blood volume, a desoxysteroid like effect. The patient's likelihood of survival is considerably compromised if he is unable to carry out this metabolic picture.

When refeeding is begun in the starving

patient a positive nitrogen balance is restored. It has been further shown that when ACTH is given to the starving patient[1] there is an increase in nitrogen excretion closely resembling the rejection of the nitrogen of diet or parenteral hydrolysate in the post-trauma patient. The marked losses of potassium seen in the immediate post-trauma period are reproduced in the starving patient by the addition of ACTH. Sodium saving is prompt on addition of ACTH immediately after starting starvation.

Thus it appears that the addition of ACTH to the picture of short term starvation produces a picture similiar in most respects to the post-trauma metabolism. The more ACTH is given the more striking are the alterations which may be correlated with mild and with severe trauma.

Newer concepts of the metabolic changes following upon trauma hold that this metabolism is a normal, favorable and desirable thing and is associated with repair of the injured tissues and a successful convalescence. Therapeutic interference is indicated in the patient who does not manifest the normal metabolic response and it is our business to recognize the patient who is not or cannot carry out this metabolic picture. This is best accomplished by a knowledge of the normal metabolism following trauma and the influences exerted on this metabolism by starvation, previous illness or trauma, extra-renal losses and the endocrine response.

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CANCER FELLOWSHIPS

The New Jersey State Department of Health announces several fellowships for residency training in oncology. The first of these fellowships will start on July 1. Each fellowship is for one full year of training and will be granted in general oncology or in one of the special aspects of this subject, such as surgery, pathology, radiology, etc. The stipend will be $3600 per year.

Applicants must be citizens of the United States; must be licensed to practice in the state of New Jersey, or eligible for licensure; must have been accepted by one of the participating hospitals; and must submit appropriate references.

The following hospitals will participate in this fellowship program: Elizabeth General Hospital and James S. Green Memorial Tumor Clinic, Elizabeth, N. J.: Memorial Center for Cancer and Allied Diseases, New York City; American Oncological Hospital and Jeanes Hospital, Philadelphia.

Further information and application forms may be obtained from New Jersey State Department of Health, Bureau of Cancer Control, 65 Prospect Street, Trenton, N. J.

PRANTAL METHYLSULFATE IN GASTROINTESTINAL DISEASES

A STUDY OF TWENTY-FIVE CASES

Francesco D'Imperio, M.D., Camden, N. J.

Prantal,® a parasympathetic blocking agent, was found effective in alleviating the symptoms in 24 out of 25 patients with peptic ulcer and allied disorders.

In the therapy of peptic ulcer numerous drugs have been employed but none have been found advantageous for continued use. Many of the drugs previously available possess the undesirable side effects of atropine in varying degrees. Pharmacologists have screened a large number of compounds in an endeavor to find a drug which would inhibit the fibers of the parasympathetic system associated with gastric secretion and motility. The quaternary ammonium compounds were subjected to scrutiny for this purpose. One of the promising compounds developed as a result of this investigative endeavor was Prantal Methylsulfate,® * N,N-dimethyl-4-piperidylidene-1,1-diphenylmethane methylsulfate, a quaternary amine soluble in water (50 mg./cc.), methanol, ethanol, and chloroform, but insoluble in benzine and petroleum ether.

Pharmacology

Margolin, *et al.*[1] observed that Prantal® acts selectively by parasympathetic blockade on gastric secretion and motility at doses which do not produce mydriasis. When a 1% Prantal® solution was applied locally to the rabbit eye it was not mydriatic, while 0.1% methantheline bromide (Banthine®) produced mydriasis. In dogs, cardiac arrest by faradic vagal stimulation was blocked by intravenous Prantal® at 0.05 mg./Kg. which also inhibited the carotid sinus pressor reflex in dogs, and blocked the superior cervical ganglion in cats. When administered orally to dogs, it was found that 37.5 mg./Kg. of Prantal® inhibited gastric motility as effectively as 75 mg./Kg. of methantheline bromide when measured by roentgenologic determination of gastric emptying time after a barium sulfate meal.

Perlman and Bonsal[2] studied the metabolism and excretion of Prantal® in dogs. They found by analysis of the urine and feces following a single oral or intravenous dose of the compound to ten dogs that a total of 40-60% of the drug was recovered. After oral administration of 37.5 mg./Kg. of Prantal,® an average of 46.6% of the compound was eliminated in the urine during a three-day period, of which 43.6% was excreted during the first 24 hours. After intravenous administration of 7.5 mg./Kg., 31.8% was excreted in the urine during the first three days, with 20.2% excreted during the first 24 hours. Following oral administration of Prantal,® the fecal excretion during the three-day period was approximately 2% and following intravenous administration, the fecal excretion of the drug over the three-day period was approximately 20%. Following the intravenous administration of 17.5 mg./Kg. to dogs, the plasma level after 35 minutes was 1.2 microgm./ml. By the end of one hour the plasma level was below 0.5 microgm./ml.

Early Clinical Studies

Prantal® has been studied by various clinicians to determine its usefulness in the therapy of peptic ulcer and related gastrointestinal disorders. Marks[3] studied forty-six cases of peptic ulcer and 89% of these cases reported relief of pain within an average of six days.

Vogel[4] studied fifteen patients having duodenal ulcer or ulcer-like syndromes. He found Prantal® superior to any of the currently available compounds of similar pharmacologic action and undesirable side effects were seldom observed. He observed that when Prantal® was used in sufficiently high dosage those pa-

* Prantal Methylsulfate was supplied through the courtesy of the Division of Clinical Research of the Schering Corporation, Bloomfield, New Jersey.

tients previously regarded as treatment failures could be rendered symptom-free.

Heineken[5] studied fifty-three peptic ulcer patients receiving Prantal® and followed their improvement with x-ray studies. X-ray and clinical evidence of complete ulcer healing was obtained in thirty-two patients. In twenty patients the follow-up x-rays showed no evidence of ulcer crater or activity although scarring was present. The ulcer persisted in one patient who improved clinically. Ten additional patients were given unrestricted diets and 200 mg. of Prantal® four times daily. The pain disappeared on the second day and did not recur during the three weeks that these patients were observed. If this last finding is corroborated by other investigators it may be that we will be able to offer the ulcer patient a much more palatable and attractive diet and will perhaps mark a departure from the present concepts of dietary management of peptic ulcer.

The cases included in our study comprise twenty cases of peptic ulcer, one case having ulcers in two locations, two cases of diverticulum of the second portion of the duodenum, one of which also had duodenal ulcer, two cases of hypertrophic gastritis, and two cases of esophageal achalasia, second and third degree.

CASE HISTORIES

No. 1—A 32-year old male complained of epigastric pain of two years' duration. He had been distressed for several months by everything that was eaten and coffee seemed to precipitate the attacks. Pain occurred one-half to one hour after meals. Three days before his visit to the office he experienced severe pain which radiated to both sides subcostally. Relief was obtained by emesis. The vomitus resembled coffee grounds in appearance and his stools were tarry. He was admitted to the hospital on March 10, 1952 with a provisional diagnosis of bleeding gastric ulcer. He was given a Sippy diet together with atropine and sedation. Pain and nausea persisted so that atropine was discontinued and Prantal®,† 1 cc. every six hours was started. Routine laboratory studies and an electrocardiogram were normal. Gastric analysis was performed on March 17. The values were: fasting 0; 1 hour, 11; and 2 hours, 10 clinical units. The gastric residuum was normal in volume. A gastrointestinal series on March 19 showed a possible ulcer on the pyloric sphincter and a very irritable, non-filling duodenum representing an old duodenal ulcer. Gastroscopy on March 21 revealed an ulcer on the lesser curvature at the incisura angularis. The patient was discharged from the hospital on March 21 symptom-free and continued on Prantal,® 100 mg., orally and phenobarbital, 30 mg. (gr. ½), every six hours, and an ulcer diet. Gastroscopy was repeated on April 14 and on June 26 and no evidence of ulcer was seen. The patient continued on Prantal,® 100 mg., every eight hours and remains symptom-free.

No. 2—A 70-year old female was first admitted to the hospital on November 20, 1951 complaining of epigastric pain of six months' duration. The pain was more intense between 6:00 p. m. and 3:00 a. m., and vomiting provided the only relief. The patient had lost 27 lbs. in six months. She responded very slowly to sedation, antispasmodics, and a Sippy diet. Blood examinations were normal and the stool examinations were negative for occult blood. Gastric analysis was normal with 60 cc. of gastric residuum at the end of the two hour period. Barium swallow showed a deformity of the duodenal cap with irritability, but a definite ulcer was not visualized. Hypermotility, as evidenced by barium in the descending colon after six hours, was noted. She was discharged on the seventeenth hospital day and followed in the clinic. She returned to the clinic at one to two week intervals and stated that she continued to have distress with occasional vomiting. She became progressively worse and was readmitted to the hospital on April 1, 1952 complaining of severe epigastric pain, nausea, vomiting, and weight loss. She was given sedation and Prantal,® 100 mg., every six hours along with a Sippy diet. Within twenty-four hours she was asking for more food and was given puddings, custards, and cream soups. By the third day she was on an ulcer diet. Within twenty-four hours she became free of pain and remained so throughout her hospital stay. Gastric analysis on April 4 was normal with a gastric residuum of 20 cc. at the two hour period. Blood examinations and stool examinations were negative. Barium swallow on April 11 again showed a deformed duodenum and it was felt that the ulcer still showed some activity but of a lesser degree than on the previous examination. She was discharged on the twelfth day from the hospital. In this case Prantal® was superior to other antispasmodics used and relief of pain was obtained in twenty-four hours, whereas heretofore she had not been free of pain for four months. Her appetite improved immediately and she was advanced to an ulcer diet on the third day. The patient was followed in the clinic at two-week intervals and maintained on Prantal,® 100 mg., every six hours with phenobarbital, 30 mg., (gr. ½). She has returned to her normal weight symptom-free.

No. 3—A 51-year old male was admitted to the hospital on April 11, 1952 complaining of epigastric pain. The pain had increased in severity during the three weeks previous to admission and radiated to his back. He had previously been admitted to the hospital in 1948 for the treatment of a duodenal ulcer. He had lost 30 lbs. during the past two years. He was given Prantal,® 100 mg., every six hours with phenobarbital, 30 mg., (gr. ½) and a Sippy diet. The following day he developed severe precordia pain with cold sweat and shortness of

† 1.0 cc. of Prantal® contains 25 milligrams.

breath. The possibility of myocardial infarction was considered during the ensuing weeks. He had several electrocardiograms and true infarction could never be demonstrated. On April 21 he complained of pain in the left leg with positive signs of thrombophlebitis. This subsided in the left leg and flared up in the right leg. A gastrointestinal series on May 9 revealed an old duodenal ulcer with activity. However, Prantal® was continued in spite of these developments. He was released from the hospital on May 24. When seen on June 3 he was symptom-free. He was taking Prantal,® 100 mg., three times a day and was followed at weekly intervals in the clinic. Barium enema was negative, blood counts and gastric analysis were normal. The electrocardiogram was repeated and was within normal limits. He was last seen on July 15 and no recurrence of ulcer symptoms had developed. A slight swelling of both ankles was noted. Since leaving the hospital he had gained 20 lbs. He was maintained on 100 mg. of Prantal® four times a day and 30 mg. (gr. ½) of phenobarbital.

No. 4—A 69-year old male was admitted to the hospital on March 28, 1952 complaining of anorexia, weakness, and melena. On March 18 he first noticed that his stools were tarry and they remained so up to the time of hospital admission. The patient fainted before being admitted to the hospital and was carried into the receiving ward unconscious. At the time of admission his hemoglobin was 6.2 Gm. % and his red blood count was 2,400,000 per cu. mm. He was immediately transfused and placed on 1 cc. of Prantal® and 30 mg. (gr. ½) of phenobarbital every six hours plus a Sippy diet. Stool examination on March 29 was 4 plus by the guaiac test. On April 2 he was given Prantal,® 100 mg., and phenobarbital 30 mg. (gr. ½) every six hours. On April 3 stool examinations were negative for blood. He had never had any symptoms referable to the gastrointestinal system. Gastric analysis was performed on April 6. The values were: fasting, 27; ½ hour, 30; 1 hour, 35; 1½ hours, 51; and 2 hours, 55 units. A gastrointestinal series on April 9 showed an irregular duodenal cap. During his hospital stay he received 1500 c.c. of blood plus iron, vitamins, and crude liver. He was discharged on the thirteenth hospital day, April 11. He was subsequently followed in the clinic and gastric analysis on May 23 was: fasting, 0; ½ hour, 23; 1 hour, 34; 1½ hours, 12; and 2 hours, 5 units. The patient was seen again in the clinic on June 3 and July 1 and was symptom-free. He was maintained on Prantal,® 100 mg., every six hours and continued on a modified ulcer diet.

No. 5—This 64-year old female patient was first seen on March 24, 1952 complaining of epigastric pain occurring three hours after meals and always relieved by milk. Her first attack occurred three weeks after her gallbladder was removed a year ago. She had a symptom-free interval between her first attack and the present one. The pain awakened her at 3:00 a. m. and radiated subcostally to her back and was relieved by hot milk. She was given a Sippy diet, Prantal,® 100 mg., and phenobarbital, 30 mg., (gr. ½) every six hours. Gastric analysis was performed on April 6. The values were: fasting, 22; ½ hour, 18; 1 hour, 46; 1½ hours, 48; 2 hours, 50; and 2½ hours, 20 units. Blood, urine, and stool examinations were negative. A gastrointestinal series revealed a negative stomach and duodenum. Hypermotility of the small bowel was observed at 2 hours with the head of the column of barium at the splenic flexure. Sigmoidoscopy on April 15 was negative. Gastric analysis on May 7 revealed a normal curve. A second gastrointestinal series revealed a possible ulcer of the pyloric antrum only on one film. Gastroscopy on May 8 did not reveal any ulcer. The patient was symptom-free when seen on June 4 taking Prantal,® 100 mg., and phenobarbital, 15 mg., (gr. ¼) every six hours. On June 15 she was symptom-free and taking Prantal® three times daily. The patient stated that she had never felt better in her life, and it appears that she has made an excellent response to Prantal.® It is my clinical impression that this patient had a penetrating duodenal ulcer.

Case No. 6—This 48-year old male was readmitted to the hospital complaining of severe abdominal pain with nausea and vomiting on March 28, 1952. In August 1951, he injured his back in a fall and complained of stomach pain and rectal bleeding for which he was hospitalized and a diagnosis of duodenal ulcer was made. He was placed on a bland diet and given Banthine® and Amphojel.® His second admission was in October 1951 and a niche defect in the duodenum was still visualized. He had never been free of pain up to the time of his admission on March 28. For three weeks prior to his last hospital admission he had severe pains in the epigastrium which radiated through to the back. He vomited and was unable to retain water. Pain interfered with his sleep for three nights. He no longer was relieved by Banthine® and Amphojel.® The Banthine® caused a dryness of the mouth and visual disturbances. He had exquisite tenderness in the midepigastric region with no rigidity. He was given one dose of Demerol®, 100 mg., and Prantal®, 1.0 cc., with sodium phenobarbital, 0.12 Gm., (gr. 2) every six hours which was augmented by intravenous fluids and a Sippy diet. The following day he still complained of pain and Prantal® was increased to 1.5 cc. every six hours. A gastrointestinal series on April 3 showed a possible ulceration at the base of the duodenal cap; barium enema demonstrated recurrent spasm. Gastric analysis was performed on April 7. The values were: fasting, 20; ½ hour, 10; 1 hour, 34; 1½ hours, 55; and 2 hours, 40. Gastroscopy on April 7 was negative. On April 14 sigmoidoscopy showed an injected membrane for a distance of 25 centimeters. Prantal® had been increased on April 11 to 2 cc. every six hours. He was discharged on April 16 and was maintained on Prantal®, 200 mg., and phenobarbital, 30 mg. (gr. ½) every six hours. This dosage of Prantal® relieved his pain and no side reactions were observed.

No. 7—A 60-year old male was admitted to the hospital on April 18, 1951 complaining of weakness, emesis, and melena. Fifteen years ago a diagnosis of peptic ulcer had been made. He was treated by transfusions, sedation, antispasmodics and diet. A gastrointestinal series showed a deformed duodenal cap and a diverticulum of the second portion of

the duodenum. He was seen again on March 23, following another episode of bleeding. He complained of weakness and epigastric pain of one week's duration, and melena. He was given sedation, Prantal®, 1 cc., every six hours, and a Sippy diet. He was exquisitely tender in the midepigastric region, but by the third day all tenderness was gone and Prantal,® 100 mg., was given orally instead of parenterally. Stool examinations were positive for blood on three occasions and two transfusions were given. All of the liver function tests were normal. On March 30 a gastric analysis was performed. The values were: 1 hour, 48; 1½ hours, 54; and 2 hours, 43. Barium swallow on April 4 again showed an irritable and deformed duodenal cap and evidence of activity. He was discharged on the sixteenth hospital day and continued taking Prantal,® 100 mg., every six hours, phenobarbital, 30 mg. (gr. ½), and an ulcer diet. He did not complain of dryness of the mouth, blurring of vision, constipation, or urinary disturbances on Prantal® therapy. He was symptom-free when seen on June 3, 1952. He was taking the same medication every eight hours.

No. 8—A 26-year old male patient was seen on January 12, 1952 complaining of epigastric pain which had troubled him for six months. The pain was felt two to four hours after meals and was relieved by food or soda. He began having epigastric upsets while in the army but was never treated for it. He had been in pain even when on a bland diet. He did not have any night pain. His bowel movements were constipated. During his army service he was treated for malaria and hookworm. The family history was noncontributory. When examined he had moderate epigastric tenderness. He was given an ulcer diet, sedation, and aluminum hydroxide gel. One week later the patient complained that his condition was worse and food did not relieve him. He was placed on another antispasmodic and one week later he felt slightly better although he still had pain. Blood, urine, and stool examinations were negative. Gastric analysis was performed on January 27 and showed hyperacidity. He continued to have symptoms and the gastrointestinal series on February 14 showed an active duodenal ulcer. He still complained of pain on February 23 and was given Prantal,® 100 mg., every six hours. A week later his pain was gone. He complained of pain without relation to meals on March 29 and Prantal® was increased to 150 mg. every six hours. On April 2 the gastrointestinal series did not show any evidence of an ulcer niche, the gallbladder was visualized, and barium enema was negative. Prantal® was increased to 200 mg. every six hours and the patient was relieved of pain and felt fine. He was symptom-free on May 17 and was taking 100 mg. of Prantal® before meals and 200 mg. before bedtime and felt well on this dosage. In the interval between May 17 and June 30 the patient was to go on strike and complained of feeling uneasy, and when the dosage of Prantal® was increased to 200 mg. every six hours, his uneasiness was relieved. This patient had been on Banthine® when first seen and was not relieved by it or any of the other drugs until he was given Prantal.®

No. 9—A 50-year old male developed constant pain not relieved by food and a feeling of heaviness after eating for one month. He noticed his bowel movements were black. The gastrointestinal series showed an irregularity in the greater curvature which was thought to be hypertrophic gastritis, although an early infiltrating lesion could not be ruled out. While there was a constant deformity of the duodenal cap, an active ulcer crater could not be visualized. On February 26, 1952 blood counts, urinalysis, and stool examinations were negative. Two Papanicolaou smears on March 4 were negative for malignancy. Gastric analysis done on the same date showed that the values were: fasting, 0; 1 hour, 10; and 2 hours, 13; and he was placed on Prantal,® 100 mg., and phenobarbital 30 mg. (gr. ½), every six hours. Gastroscopy on March 11 showed a moderately severe hypertrophic gastritis of the greater curvature of the pars media. He was relieved of pain forty-eight hours after beginning Prantal,® was hungry, and wanted to eat. He returned to work on March 25 symptom-free. Gastric analysis was performed on April 22. The values were essentially as before. He was seen in the clinic on June 17 and July 15. At both times he was symptom-free and anxious to eat everything. He was able to work every day and was continued on Prantal,® 100 mg. four times a day. This patient had a severe hypertrophic gastritis controlled by Prantal.® No recurrences occurred in four months although recurrences are not unusual in this condition.

No. 10—A 38-year old male was admitted to the hospital on March 18, 1952 with a history of epigastric pain occurring two to three hours after meals which radiated subcostally to the back and up under the right scapula. The pain was relieved by milk and milk products and aggravated by fried or fatty foods and cabbage. He noticed tarry stools on several occasions and had been under constant treatment with no relief of symptoms. Physical examination revealed exquisite tenderness in the midepigastric region. He was given Prantal®, 1 cc., and sodium phenobarbital, 60 mg. (gr. 1) every six hours. He was given a modified Sippy diet, and within forty-eight hours he was free of pain and only slightly tender. Blood count and urinalysis were normal on admission; stools were negative on three occasions for blood; and the protein albumin-globulin ratio was normal. Thymol turbidity was negative and prothrombin time was normal. Gastric analysis using the Ewald test meal revealed a fasting hydrochloric acid of 26 units, rising steadily to 85 units in two hours with normal gastric residuum. Gallbladder visualization on March 24 was negative. The gastrointestinal series on March 25 showed an irritable deformed duodenal cap suggesting activity. Barium enema and sigmoidoscopy were negative. He was given Prantal®, 100 mg., and phenobarbital, 30 mg. (gr. ½), every six hours. He was discharged on March 29 on a modified ulcer regimen. Prantal® and phenobarbital were continued in the same dosage. He was symptom-free on April 7 and told to report to work still maintaining the same regimen. The values for the second gastric analysis performed on May 20 were: fasting, 68; ½ hour,

46; 1 hour, 80; 1½ hours, 92; and 2 hours, 86. He took Prantal® during this time and had been symptom-free. The patient followed the same treatment program during June and July and did not have any gastric symptoms. He worked as a plumber in a shipyard and ate everything. He is maintained on Prantal,® 100 mg., every six hours.

No. 11—A 33-year old male patient first began having epigastric pain in 1944 while in the service. The pains occurred one and one-half to two hours after eating and were relieved by milk and milk products. He had recurrences every two months. Milk no longer relieved him and he was awakened nightly with pain. For two weeks the symptoms had been very severe and the pain awakened him four to five times a night. Some relief was obtained by using soda but this lasted only for one-half hour. He had always been well until the onset of his gastrointestinal disturbances. During World War II he was deafened by a shell explosion and as a result was hard of hearing. Family history disclosed that his father died during an operation for a perforated ulcer. Physical examination revealed exquisite epigastric tenderness and rigidity. On May 12, 1952 he was given Prantal,® 100 mg., and phenobarbital, 30 mg. (gr. ½), every six hours and a Sippy diet. One week later he was free of pain in twenty-four hours. Blood urine and stool examinations were normal. The gastrointestinal series showed an old deformed duodenal ulcer. Gastric analysis was normal. He was last seen on June 30 and was maintained on Prantal,® 100 mg., and phenobarbital, 15 mg. (gr. ¼), four times a day. It was my impression that this patient had a rapidly penetrating ulcer with back pain but received immediate relief of both epigastric and back pain when Prantal® therapy was administered.

No. 12—A lawyer was first seen on March 26, 1952 complaining of epigastric pain and burning of three years' duration. For two months he had been vomiting. Sometimes after eating a normal meal he would vomit one half of it in ten to fifteen minutes. He noted that he would vomit some of his noon meal at midnight and part of his evening meal at 3:00 a. m. If a small amount of heavy food was eaten he did not vomit. The vomitus never contained blood and the stools were guaiac negative. In spite of this distressing complaint, he maintained good nourishment. The only positive finding was epigastric tenderness. A provisional diagnosis of severe achalasia, third degree, was made. An unsuccessful attempt was made to pass a gastric tube on March 27. Prantal,® 100 mg., and phenobarbital, 30 mg. (gr. ½), were given every six hours. A gastrointestinal series on April 4 demonstrated severe achalasia of the esophagus 9 centimeters in diameter. Two hours later barium was still in the esophagus. A cholecystogram revealed a gallbladder filled with stones. Prantal,® 150 mg., was continued with sedation and immediate dilation of the cardio-esophageal junction was begun with Hurst mercury dilators. After one month it was possible to employ a pneumatic dilator. Medication was continued and improvement noted. Food seemed to pass through the esophagus without sticking, but he still vomited if he drank too much water. A second examination of the esophagus using barium showed the radiologic picture to be unchanged. The patient's symptoms, however, were greatly improved. The patient continued to take Prantal®, 100 mg., every six hours and marked improvement clinically was noted in his symptoms. Patient refused surgery.

No. 13—A 54-year old male was first seen in the clinic on November 30, 1949 complaining of abdominal pain. There was no definite periodicity to his pains and no relief was obtained from foods or soda. In his youth he was accustomed to gastric upsets. A gastrointestinal series disclosed a diverticulum of the second portion of the duodenum. The results of a gastric analysis performed on February 21, 1950 were: fasting, 20; ½ hour, 58; 1 hour, 72; 1½ hours, 68; and 2 hours, 56. Biliary drainage was normal. Blood, urine, and stool examinations were normal. He was placed on Banthine® and felt very well. He was followed at monthly intervals and when seen on May 18, 1951 he stated that he was taking one-half tablet of Banthine® because of the excessive dryness of the mouth but otherwise he felt well. He returned to the clinic on May 20, 1952 with a recurrence of symptoms and the same pain. Physical examination was negative. Stool examination was negative for blood. He was given Prantal,® 100 mg., and phenobarbital, 30 mg. (gr.½), every six hours together with a modified ulcer diet. When seen on May 27 he stated that his pain had disappeared and he felt well. He made the remark that he did not have any dryness with the medication that he was now taking. On May 21 his gastric analysis was the same as it had been two years before and the gastrointestinal series again showed a diverticulum. When last seen on July 15 he had complete amelioration of symptoms.

No. 14—This 22-year old male was first seen in the clinic on March 18, 1952 as a follow-up after a ruptured duodenal ulcer. He had a typical history of duodenal ulcer. He was placed on belladonna, phenobarbital and an ulcer diet. He increased his belladonna to 23 drops before getting dryness of the mouth. As a maintenance dose, he was placed on 20 drops of belladonna. This individual had a terrific psychogenic overlay and was difficult to handle. He was seen at weekly intervals and always complained of some distress. On May 20 he was placed on Prantal,® 200 mg., and phenobarbital, 30 mg. (gr. ½), every six hours with a modified ulcer diet. He continued the same medication and was followed at weekly intervals with no further complaints.

No. 15—A 20-year old male was referred to the clinic on May 6, 1952 complaining of pain in the upper abdomen which occurred immediately after meals and lasted for two hours. Pain was precipitated by excitement and relief was obtained with milk and crackers. He had these symptoms for three years and they became more severe in the three months which preceded his visit to the clinic. He did not have any pain during the night. Past history was negative. Physical examination revealed midepigastric tenderness. Blood, urine, and stool examinations were negative. He was given

Prantal,® 100 mg., every six hours and after one week pain occurred on two occasions. The results of a gastric analysis on May 8 were: fasting, 3; ½ hour, 0; 1 hour, 5; 1½ hours, 60; 2 hours, 30; and a gastric residuum at 2 hours of 75 c.c. A gastrointestinal series on May 15 failed to visualize the duodenal cap. It was the clinical impression that this patient had a duodenal ulcer. He was well on May 27 with no complaints of pain and he was not afraid to eat the foods permitted. The patient felt well on June 20 and was adhering to the diet. He took Prantal, 100 mg., four times a day one-half hour before meals and before retiring.

No. 16—A 37-year old female with a diagnosis of psychoneurosis and umbilical hernia was seen in the clinic on April 8, 1952 complaining of nausea, vomiting, and severe epigastric pain. This patient weighed 200 lbs. She had pain for one year in the right lower quadrant radiating to the right leg, and for four months she had epigastric pain radiating to the umbilicus. She claimed that she vomited everything she ate and only obtained relief by taking soda and peppermint water. Foods did not relieve her distress and the pain interfered with her sleep. She was usually constipated and laxatives only made her feel worse. Physical examination revealed a large, obese abdomen and umbilical hernia, tenderness in the epigastrium, and a tender, spastic colon. She was given a Sippy diet, phenobarbital, 30 mg. (gr. ½), three times daily and 0.1 Gm. (gr. 1½) for sleep, and Trasentine,® 75 mg., four times a day. She was nauseated on April 15 and had some relief of pain, but was unable to rest. A gastrointestinal series on April 15 revealed a duodenal ulcer and a cholecystogram disclosed biliary dyskinesia. Biliary drainage was attempted; no bile or crystals were recovered. Blood, urine, and stool examinations were negative. Gastric analysis revealed a normal acid curve. She was given Prantal,® 150 mg., and phenobarbital, 30 mg. (gr. ½), four times daily. She returned to the clinic on May 27 and complained of nausea. The vomiting and pain were absent and the most recent medication had made it possible for her to sleep at night. Prantal,®, 150 mg., and phenobarbital, 30 mg. (gr. ½), four times a day were continued and the patient was symptom-free on June 10. She returned on July 1 to have her prescription refilled and she mentioned that she felt better than she had in years and was taking an active interest in her household duties.

No. 17—A 65-year old male in whom a diagnosis of duodenal ulcer had been made was treated for two hemorrhages, one in 1949 and one in 1950. Surgery had been refused by him. He had recurrences of symptoms at least twice a year and responded poorly to treatment. He suffered from gastric disturbances, heartburn, nausea, and occasional pain. During the past two years milk relieved his symptoms. The patient was seen on April 5, 1952. He complained of abdominal distress and stated that he had a cold three weeks earlier and his stomach was upset. He did not have any vomiting, pain, or tarry stools. He complained of nausea and vomiting of three days' duration when he was seen on May 17 and claimed he had 'vomited a bucketful of yellowish material'. He refused hospitalization. A gastric lavage was done which returned 8 ounces of gastric contents and also food that had been eaten three days previously. Stool examinations were negative for blood. He was placed on skim milk, 1 ounce every hour, and Prantal,® 200 mg., and phenobarbital, 60 mg., (gr. 1), every six hours. When he was seen the following morning another gastric lavage showed no retention and the patient was hungry and wanted to eat. He was placed on a Sippy diet, 4 ounces every hour, plus Prantal,® 200 mg., and phenobarbital, 60 mg., every six hours. The next morning there was no gastric residuum present. He followed a Sippy diet for five days and took Prantal,® 200 mg., and phenobarbital, 30 mg., (gr. ½), every six hours. The patient remained on an ambulatory basis. A new ulcer was outlined on the greater curvature of the cap when he was examined on June 3. On his last visit on July 15 he was still following the modified ulcer diet with no complaints and no evidence of retention, and Prantal® was reduced to 100 mg. every six hours. Prantal® was a valuable adjunct in the therapy of this case of an old duodenal ulcer with two previous hemorrhages and then pyloric obstruction. It is my feeling that Prantal® was the main factor in relieving spasm and edema secondary to duodenal ulcer as the cause of retention.

No. 18—A 76-year old male stated that he had been examined six years ago and a diagnosis of ulcer was made. During those six years he had been in the hospital on three occasions for treatment of his ulcer, and he had never been free of pain for a whole week. For two years he had been vomiting several times a week, and in the two months preceding his visit to the office, his symptoms became worse. He vomited after every meal and had severe night pains which prevented him from sleeping. He sustained a weight loss of 20 lbs. in these two months. Physical examination revealed loss of subcutaneous fat and exquisite tenderness in the midepigastric region with pain radiating to the back. The past history was noncontributory. The patient entered the hospital on June 4, 1952 and was given a Sippy diet and intravenous fluids and received Prantal,® 100 mg., every six hours with sedation. Twenty-four hours later the vomiting had ceased and the patient was hungry and willing to eat. A gastrointestinal series again revealed an old cloverleaf deformity. Within 72 hours after this regimen he was placed on a modified ulcer diet and within four weeks he had a complete amelioration of symptoms. He gained 10 lbs. Prantal® was continued, 100 mg., every six hours. He was seen on July 21 and was free of pain and other symptoms. He mentioned that previous medication he had been taking made him dry and constipated, whereas no side effects were encountered with Prantal.®

No. 19—A 29-year old male complained of severe abdominal pain which existed for a few years. When the pains had first begun they occurred at two to four hour intervals and were always relieved by milk or soda. For six months the pains were continuous and awakened him two or three times a

night; food provided no relief. Formerly, Banthine® relieved him but he no longer obtained relief from this medication. Examinations of the blood, urine, and stools were negative; gastric analysis revealed a normal acid curve; and there was no overnight residue or two-hour retention. A gastrointestinal series on May 13, 1952 revealed a deformed duodenal bulb showing previous ulceration. He was placed on Prantal,® 200 mg., with phenobarbital, 45 mg., (gr. ¾), every six hours, and a Sippy diet. When seen the following week, his night pain had disappeared. Prantal,® 200 mg., and phenobarbital, 30 mg., (gr. ½), every six hours were continued; two weeks later the patient was symptom-free and had no recurrence. This patient had previously been treated for a period of two years without relief. When he was placed on Prantal,® in one week's time he was symptom-free.

No. 20—This 70-year old female was admitted to the hospital with a chief complaint of dysphagia. This patient's symptomatology developed on the previous day and she was not able to retain water. She was given phenobarbital, 60 mg., (gr. 1) and atropine, 0.6 mg., (gr. 1/100) every six hours, and intravenous fluids with nothing by mouth for twenty-four hours. In twenty-four hours fluids were tried again by mouth with the same result. She was unable to swallow anything for the next three days. The provisional diagnosis here was achalasia due to its rapid onset. On the fourth day Prantal,® 1 c.c., was given intramuscularly every four hours. The following day she began taking food and liquids. A Hurst 28-F mercury dilator was passed without difficulty. An esophagram revealed second degree achalasia. On the seventh hospital day she was given Prantal,® 100 mg., by mouth, phenobarbital, 30 mg., (gr. ½), and a full house diet. She was discharged on the eighth hospital day symptom-free and eating a normal diet. She was continued on Prantal®, 100 mg. and phenobarbital, 30 mg., four times a day. This is the second case in which clinical improvement was noted in a patient with achalasia following the administration of Prantal.® This patient was able to eat her meals without difficulty while taking Prantal.®

No. 21—A 61-year old male complained of epigastric pain for six months. Pain was accompanied by a burning sensation which occurred two to four hours after meals and was relieved by milk only for a period of one-half hour. He experienced no night pain. There was no hematemesis, melena nor weight loss. When he was first examined on April 28, 1952 he was placed on sedatives, antacids, and antispasmodics with very little effect. Gastric analysis was performed on May 12, and showed hyperacidity. He was given Prantal,® 100 mg., and phenobarbital, 30 mg., (gr. ½), every six hours. He returned to the office a week later feeling somewhat better but still complaining of occasional burning. Prantal® was increased to 150 mg. every six hours on May 26 and considerable improvement was noted with the higher dosage. On June 9 a gastrointestinal series revealed a duodenal ulcer with a hiatal hernia. He still complained of burning two or three times weekly and Prantal® was increased to 200 mg. every six hours. On this dosage he did not have any symptoms so long as he remained upright, but when he bent forward, he experienced some burning in the epigastrium. On July 16 a second gastric analysis did not show any difference in the acid curve from the previous one. He was last seen on July 21 symptom-free and continuing on Prantal,® 200 mg., and phenobarbital, 30 mg., four times a day with a modified ulcer diet.

No. 22—A 48-year old male sustained severe burns of the face and hands in an explosion in March of 1951. Two months later he complained of burning sensations in the epigastrium and throat which were relieved by milk and soda. His condition became worse so that by September 1 the burning sensation would occur ten to thirty minutes after meals and was not relieved by milk or soda. The pain awakened him from sleep between 1:00 and 2:00 a. m., and he noticed pain in his back which was worse at night. A gastrointestinal series on February 26 revealed an old duodenal ulcer with a small, new ulcer at the base of the cap. On March 26 he was placed on Prantal,® 100 mg., and phenobarbital, 30 mg., every four hours, with a Sippy diet. He reported no improvement in his symptoms on April 16. He was then given Banthine® instead of Prantal® and aluminum hydroxide gel was added. On April 30 he reported he felt well for one week, but the second week he had a recurrence of his symptoms. Banthine® and aluminum hydroxide gel were continued. On June 2 he still complained of a burning sensation and general malaise. He was given Prantal,® 200 mg., and phenobarbital, 45 mg., every six hours concomitantly with a modified ulcer diet. He was much improved on June 16 and was symptom-free. He was symptom-free on June 20 and continued to show improvement.

No. 23—A 36-year old male was first seen on January 14, 1952 complaining of constant pain in his abdomen without relation to food and not relieved by food. The pain was relieved by lying down and never occurred at night or awakened him. Previously he had numerous gastric analyses done —all normal—and other tests which were negative which was quite disconcerting to him. Even though treated for three years, his gastrointestinal series, barium enema, and cholecystogram had been negative. Physical examination revealed tenderness subcostally over the gallbladder and tenderness in the midepigastrium and over the pelvic colon. The provisional diagnosis after examination was hypertrophic gastritis. He was treated for one month without improvement and was quite discouraged. Gastroscopy on February 13 revealed a moderate hypertrophic gastritis of the pars media. Sigmoidoscopy on February 23 showed an injected mucous membrane with adherent mucus. Little improvement was observed from past treatment with the exception that the pain was intermittent and stopped for several hours a day. He was given Prantal,® 100 mg., four times a day on April 5 and he felt much improved on April 16. The pain was not as frequent and he was eating more food.

Prantal® was increased to 150 mg. four times daily and on May 14 he reported considerable improvement over the past months. He had experienced pain on only a few occasions. There was a weight gain of 10 lbs. in two months of treatment. He reported on June 18 a pain-free interval of three weeks. He was eating well and had no complaints. Prantal,® 150 mg., four times a day was continued. He was symptom-free on July 23 and maintained on Prantal,® 150 mg.

No. 24—A 33-year old male was first seen on May 5, 1952. One week before he had an acute gastrointestinal upset and was taken to the hospital. He complained of nausea, heartburn, and epigastric pain at infrequent intervals and especially after a heavy meal. One and one-half years ago he had been awakened from sleep with severe pain in his back between the scapulae. The clinical impression at that time was cholelithiasis. A gastrointestinal series revealed an active duodenal ulcer. Gallbladder visualization was negative. While he was taking barium for his x-rays, he vomited coffee-ground material. He never had tarry stools. He was still complaining of pain in the stomach when discharged from the hospital. Physical examination revealed tenderness over the duodenum and over the pelvic colon. The family history included a brother who was treated for peptic ulcer. His past personal history was negative. The patient was given Prantal,® 150 mg., with phenobarbital, 30 mg., every six hours and a Sippy diet. He stated on May 12 that his pain was gone twelve hours after taking the medication and that he had no burning or pain since that time. He was placed on a modified ulcer diet. Blood, urine, and stool examinations were negative. Gastric analysis was performed on May 23. The values were: fasting 0; ½ hour, 38; 1 hour, 44; 1½ hours, 48;, and 2 hours, 30. The patient was symptom-free on June 24 and was maintained on Prantal,® 150 mg., and phenobarbital, 15 mg., every six hours.

No. 25—A 29-year old nurse was admitted on July 26, 1952 to the hospital complaining of severe epigastric pain, nausea, and vomiting. She was given Prantal® 1.5 c.c., every six hours. She complained of severe headaches and dryness of the mouth after taking Prantal® just as she had complained of atropine in the past. The dose was reduced to 1 c.c. every six hours with the same complaints. It was further reduced to 1 c.c. daily and she still complained of severe headaches and the drug was discontinued. In spite of her youth, this woman has had a rather extensive surgical history and it was felt that the question of possible narcotic addiction had to be entertained. Her past history revealed a hysterectomy at the age of 21 for fibroids, a left nephrectomy in 1948 for nephrolithiasis, and a posterior gastroenterostomy in 1950. She was also involved in an auto accident in 1950 and a gastric resection was performed for marginal ulcer in 1952. Following all this surgery, she was symptom-free for only a period of six weeks when nausea and vomiting returned. During her surgical illnesses, this patient had narcotics for pain and it is possible that a non-narcotic medication would not be acceptable to this patient in her present state of health.

DISCUSSION

Prantal Methylsulfate® was employed in the treatment of twenty cases of peptic ulcer, one case having ulcers in two locations, two cases of diverticulum of the second portion of the duodenum, one of which also had duodenal ulcer, two cases of hypertrophic gastritis, and two cases of esophageal achalasia, second and third degree. Complete relief of pain was achieved in twenty-four of the twenty-five cases (96%). In one case (4%) the drug was discontinued because of the patient's complaints of severe headache and dryness of the mouth. This was patient number 25 who had an extensive surgical history although only 29 years old. The impression was entertained that this was probably a case of narcotic addiction and that in the present state of this patient's health, no non-narcotic medication will provide the type of relief that she is accustomed to expect from her past experience with narcotics. In two cases of esophageal achalasia, Nos. 12 and 20, relief of pain was obtained but no improvement in the radiographic picture was noted. Two cases of hypertrophic gastritis, Nos. 9 and 23, were relieved of pain by the use of Prantal®. In Case No. 7 there was a duodenal ulcer and a diverticulum of the second portion of the duodenum and in Case No. 13 a diverticulum of the second portion of the duodenum; in both cases the symptoms were relieved by Prantal®.

Six cases in this series of twenty-five had previously taken Banthine.® Five of the six cases no longer obtained relief from Banthine®. Banthine® relieved the symptoms in Case No. 13, but the patient complained of excessive dryness of the mouth. The side effects noted with Banthine® were dryness of the mouth, visual disturbances, and constipation which precluded its further use.

SUMMARY

1. Prantal Methylsulfate,® a new cholinergic blocking agent, has been employed in the treatment of twenty-five cases of gastrointestinal diseases. The cases treated were twenty cases of peptic ulcer, one case having ulcers in two locations, two cases of diverticulum of the second portion of the duodenum, one of which also had a duodenal ulcer, two

cases of hypertrophic gastritis, and two cases of esophageal achalasia, second and third degree.

2. Relief of symptoms was effected in twenty-four (96%) of the cases. In the one case where the drug was not efficacious, a fair trial of the drug was not provided because of the unusual nature of the patient's past surgical experience and present symptomatology. Six cases previously treated with Banthine® were changed to Prantal® when the side effects of dryness of the mouth, visual disturbances, and constipation, as well as failure to relieve the symptomatology further, were observed with Banthine.® In one case Banthine® relieved the symptoms, but excessive dryness of the mouth prompted its discontinuance.

3. In the dosages employed, which varied from 1 c.c. every six hours by injection to 200 mg. every six hours orally, no side effects with Prantal® were observed. After the disturbing symptomatology was brought under control, the patients were maintained on a dosage of Prantal® that varied from 2 c.c. by injection to 200 mg. orally every six hours.

4. It is felt that a valuable new drug has been added to the armamentarium of the physician for the treatment of peptic ulcer and related gastrointestinal complaints.

411 Cooper Sreet

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4. Vogel, W. F.: J. Med. Soc. New Jersey 49:105-110, (March) 1952.
5. Heinecken, T. S.: Scientific Exhibit National Gastroenterological Association, New York, N. Y., Oct. 21-25, 1952.

RESEARCH CONTEST IN "TOXEMIAS OF PREGNANCY"

A two year contest to promote research on "toxemias of pregnancy" has been announced by the American Committee on Maternal Welfare, Inc.

The contest is open to students and personnel in the health professions who are not of higher academic rank than instructor, or who are of junior rank on the hospital or other staff with which they are connected. All theses must be based upon original work done by the authors and must be submitted no later than January 1, 1954. First and second prizes of $500 and $250 will be awarded. For further information write to the American Committee on Maternal Welfare, Inc., 24 West Ohio Street, Chicago 10, Illinois.

QUINIDINE IN MYOCARDIAL INFARCTION

A frequent cause of early death in acute myocardial infarction is the development of cardiac arrhythmias which progress to fatal ventricular fibrillation. It has been suggested that the immediate use of quinidine, or one of the other anti-arrhythmia drugs, would reduce the incidence of this serious complication, and thereby influence the mortality. However, recent controlled experience with quinidine in the management of acute myocardial infarction[1] indicates that such is not the case. Using doses of quinidine ranging from 0.2 Gram every four hours to 0.4 and 0.6 Gram every 8 hours, there was no effect on the mortality rate from myocardial infarction in a treated group of patients when compared to an untreated group. In addition, it was felt that in some cases the higher doses of quinidine may actually have contributed to a fatal outcome. It was concluded that there is no justification for the routine use of quinidine after an acute myocardial infarction.

1. Cutts, F. B., and Rapoport, B.: The Routine Use of Quinidine in Acute Myocardial Infarction. New England Journal of Medicine, 247:81, July 17, 1952.

LETTERS TO THE JOURNAL

Dear Editor:

Recognizing that anyone can criticize, I nevertheless ask your indulgence concerning the article titled, "Public Health Aspects of Cytology in Cancer Detection", by Drs. Miller, Moog and Lee, THE JOURNAL of The Medical Society of New Jersey 50:20 (January, 1953).

To quote from the last sentence of paragraph two, column two, page 20—"This prevents the loss of valuable time and avoids unnecessary and dangerous hormone administration if a malignancy is revealed". Apparently the authors feel that if one has a negative smear, hormonal therapy may be given any female in the menopausal age. If this policy is pursued, someone is going to have a very hypertensive face.

In Table III, column one, page 21, they list 30 cases as positive. If one studies this table and the preceding tables closely, it can be seen that despite all their efforts approximately .2 of 1 per cent of the cases were positive. Other workers have previously shown that the cost of these findings by these methods is prohibitive and such activity becomes not scientific, but rather a non-productive safari in the field of science.

Finally, in column two, page 23, the last sentence, to quote, "The pathologists and clinicians now regard this laboratory as an important step in aiding them in the earlier recognition of cancer". I cannot find any of the authors of this article listed as a member of the New Jersey Society of Clinical Pathologists or on the membership roster of the 1950 publication of the College of American Pathologists; therefore, who are the pathologists who have expressed approval of this already proved wasteful method of case finding of malignant disease? By what authority do these physicians presume to speak for the profession of pathology?

This article is misleading in that it advocates case finding methods which have been proved non-productive and a waste of taxpayers' funds.

Sincerely,

THOMAS K. RATHMELL, M.D., F.A.C.P.
Pathologist
The Mercer Hospital
Trenton, N. J.

Dear Editor:

Dr. Rathmell has apparently read our article with great attention. We feel however that he is reading into some of our statements more than we intended. We should like to make replies to his comments in the order of his presentation.

Concerning the last sentence of paragraph two, column two, page 20, we deplore the indiscriminate use of hormone therapy in any age group. It is particularly dangerous in the menopausal age. However, we recognize that these agents are widely used in the correction of menopausal complaints based on a clinical diagnosis alone. A prior curettage and biopsy would be ideal; however it is impractical to do so in all cases of irregular bleeding in the menopause prior to hormone therapy. We feel that it adds a certain measure of protection to have negative smears rather than nothing and experience has proved this to be so. Certainly, if the type of bleeding or physical findings arouse suspicion further investigation is indicated and this point is urged on all who submit specimens to this laboratory whether the smears are negative or positive.

The second criticism, that of our statistics, may be due to confusion in interpreting the number of slides and cases examined. Almost all patients had two or more smears submitted for examination. The total number of cases, as stated, was 2,943, of which 30 cases were positive. This is a little over 1 per cent.

The important conclusion to be drawn is that many patients would not have had a biopsy or curettage except on the stimulus of the cytology report. Therefore, we feel this work is adding to the number of patients who find their way to the pathologists and not subtracting from their number.

Perhaps his third comment is justified in this regard because even if we were pathologists we would still only be justified in speaking for ourselves and not pathologists in general.

Reference to the literature of the last few years will attest to the acceptance of the cytologic method as an aid in the earlier diagnosis of cancer. We might add, also, that wider applications are being developed and reported in almost every journal.

Herbert Traut, M.D., Professor of Obstetrics and Gynecology, University of California, School of Medicine, points out, "Acceptance

has been very slow and there is still a group of pathologists who object to the whole idea. Others are mildly receptive and some are enthusiastic. As a result of this idea of cytologic diagnosis as contrasted to tissue diagnosis, a whole new body of thought has developed regarding cell changes which are characteristic of cancer. This, in itself, is a significant advance and will improve tissue as well as cytologic diagnosis".

Although it is true that neither of us is a pathologist, we are nevertheless trained cytologists. The fact also exists that cytology is an established science recognized by the best universities and medical schools throughout the country. The pioneering work done in this field was accomplished by such men as George N. Papanicolaou, M.D., of Cornell University, New York; J. Ernest Ayre, M.D., Dade County Cancer Institute, Miami, Florida; and Locke MacKenzie, M.D., of Post Graduate Hospital, New York, none of whom are pathologists but all of whom are recognized cytologists.

Pathologists of such caliber as Shields Warren, M.D., Assistant Professor of Pathology, Harvard Medical School, and Olive Gates, M.D., Pathologist of Massachusetts State Tumor Diagnosis Service and Assistant Pathologist of Pondville Hospital, recognized the value of and helped establish the science of cytology. They, along with George N. Papanicolaou, M.D., wrote the handbook for the diagnosis of cancer of the uterus by means of cytology. Cytology is therefore a distinct diagnostic method different from tissue diagnosis and requires particular and specialized training.

Mass screening by serologic study for syphilis and x-ray for tuberculosis are now widely accepted public health measures but were not always so. This pioneer effort in early case finding of cancer may give us information as to the possibilities of mass cancer diagnosis. Only investigation and analysis over a period of time will demonstrate its worth economically. We maintain, in this laboratory, the most complete follow-up studies in order to establish such points.

The doctor and the patient whose unsuspected lesion is diagnosed in an early and curable stage feel that the dollar is well spent. Incidentally, 73 doctors in the city of Paterson utilized our laboratory during the past year on a routine basis to detect such cases.

In conclusion, and with no malice, we wish to state that although we do not presume to speak for the profession of pathology, neither do we concede that pathologists who have no recognized and formal training in cytology should attempt to speak and be critical of the field of cytology.

Very truly yours,

HOWARD B. MILLER, M.D.
Director, Division of Cytology
Board of Health
City of Paterson, N. J.

CARDIOVASCULAR TRAINEESHIP

St. Michael's Hospital (Newark) announces the establishment of a full-time traineeship program for qualified physicians in cardiovascular diseases, approved by the National Heart Institute. One physician is already engaged in this training program. An opening for another appointment will be available in July. Training will consist of lectures, clinics, conferences, and an opportunity for research in the cardiopulmonary physiology laboratories.

Further information may be obtained from Dr. N. A. Antonius, Director of the Department of Cardiology, St. Michael's Hospital, Newark.

ORTHOPEDIC CONTEST

The New Jersey Orthopaedic Society announces its annual contest for the best original contribution in the field of orthopedic surgery submitted by an intern or resident of a New Jersey hospital. The subject may cover any aspect of orthopedics, such as pathology, diagnosis, treatment, etc. The project must be completed during the internship or residency, or within six months thereafter.

Papers should be submitted to the Secretary, Dr. William Kruger, 31 Lincoln Park, Newark, on or before January 15, 1954. A prize of $100 is offered.

OBITUARIES

DR. DAVID R. ATWELL

Dr. David R. Atwell died at his home in East Orange on March 3.

Dr. Atwell was born in Waterville, N. Y. in 1858. He was graduated from New York Medical College in 1885 and interned at Flower Hospital. He practiced in Hoboken from 1886 until his retirement in 1948.

Dr. Atwell was one of the first members of the State Board of Medical Examiners, being appointed in 1890 by Governor Leon Abbott. He was a member of the American Institute of Homeopathic, an honorary member of the New York State Medical Society, and an emeritus member of the Hudson County Medical Society and The Medical Society of New Jersey.

DR. FREDERICK N. BUNNELL

Dr. Frederick N. Bunnell of Barnegat died in Delray, Florida on March 25.

Dr. Bunnell was born in Bayville in 1881, and was graduated from the College of Physicans and Surgeons, Baltimore. Following internship at Christ Hospital, Jersey City, and several years of postgraduate study, he began the practice of medicine in Barnegat in 1905.

Dr. Bunnell was a past-president of the Ocean County Medical Society, and served in the Army Medical Corps during World War I. He was elected a director of the First National Bank of Barnegat in 1909 and became its president in 1936. He was also active in civic affairs in his community, and a member of many fraternal organizations.

DR. HERMAN N. COHEN

Dr. Herman N. Cohen died at his home in Hoboken on March 16, at the age of 62.

A native of Russia, he was graduated from New York Medical College in 1917, and practiced in Hoboken for the past 30 years. During World War I, Dr. Cohen served with the Army Medical Corps.

DR. RICHARD N. CONNOLLY

Dr. Richard N. Connolly died at his home in Newark on March 25, at the age of 90.

Dr. Connolly received his M.D. degree from New York University College of Medicine in 1893 and remained there to do postgraduate work in bacteriology. In 1908 he came to Newark where he founded the Division of Bacteriology of the Newark Health Department. During his long term as head of that Division, he made many major contributions in the control of epidemic diseases, among which the most notable were diphtheria, tetanus, scarlet fever, and typhoid fever. He was influential in having city water supplies checked by health authorities.

Dr. Connolly also served as medical director of the home office laboratory of the Mutual Benefit Life Insurance Co. from 1913 until he retired in 1946, and as a member of the State Mosquito Extermination Commission. In 1928 he was president of the Essex County Medical Society and served as a member of the consulting staff of many hospitals in Essex County. He was an emeritus member of the Essex County Medical Society and The Medical Society of New Jersey.

DR. BERNARD CRANE

Dr. Bernard Crane died at his home in Atlantic City on March 21, at the age of 55.

Dr. Crane received his medical degree from the University of Michigan Medical School in 1923. He engaged in active practice for 28 years in Atlantic City. He was a charter member of the Medico-Dental Society and was active in civic and fraternal organizations. He was a member of the Philadelphia Obstetrical Society.

DR. ARTHUR T. EATON

Dr. Arthur T. Eaton, 70, of Haddon Heights, died in Cooper Hospital on April 3.

Dr. Eaton was born in Nova Scotia, and was graduated from the University of Pennsylvania Dental School in 1905, following which he practiced dentistry in New Egypt. After several years of dental practice he enrolled in the Medico-Chirurgical School, Philadelphia, from which he was graduated in 1912. He interned at Philadelphia General Hospital and practiced ophthalmology in Haddon Heights from 1913 to 1939. He was emeritus ophthalmologist of Cooper Hospital, and emeritus member of the Camden County Medical Society and The Medical Society of New Jersey.

DR. WILLIAM FLITCROFT

Dr. William Flitcroft of Paterson, died on March 24 at the age of 91 while visiting his son in Waukesha, Wisconsin.

A graduate of Columbia University Medical School in 1890, Dr. Flitcroft practiced for many years in Paterson. He was formerly chief of staff and a member of the medical consulting staff of Paterson General Hospital. He was president of the Passaic County Medical Society in 1911, and at the time of his death was an emeritus member of that society and The Medical Society of New Jersey.

DR. MEYER JEDEL

Dr. Meyer Jedel died in Newark at the age of 74 on March 7.

Dr. Jedel received his M.D. degree from the College of Physicians and Surgeons (Columbia) in 1900, following which he interned at St. James' Hospital, Newark. He practiced in Newark for 49 years and had been a member of the medical staff of the City Health Department since 1909. He was attending physician at Presbyterian, Clara Maass Memorial, and St. James' Hospitals.

NEW JERSEY STATE DEPARTMENT OF HEALTH

PUBLIC HEALTH NEWS FOR THE PHYSICIAN

PREVENTION OF RHEUMATIC FEVER

Rheumatic fever is a recurrent disease which can be prevented. It is now generally agreed that both the initial and recurrent attacks of the disease are usually precipitated by infections with beta hemolytic streptococci. Therefore, the prevention of rheumatic fever and rheumatic heart disease depends upon the control of streptococcal illnesses. This may be accomplished by (1) early and adequate treatment of streptococcal infections in all individuals and (2) prevention of streptococcal infection in rheumatic subjects.

The Council on Rheumatic Fever and Congenital Heart Disease of the American Heart Association has prepared recommendations for the diagnosis and treatment of streptococcal infections. Write for copies to the American Heart Association, Inc., 1775 Broadway, New York City, New York.

BLACK-STEVENSON MEMORIAL CLINIC

The Black-Stevenson Memorial Clinic of the Presbyterian Hospital in Newark was established by the Black-Stevenson Foundation to care for needy cancer patients with findings or symptoms suggestive of a tumor referred to it from a private physician or hospital clinic by letter. Routine examinations (so-called health maintenance examinations) will not be done in this clinic.

The clinic is divided into seven sections; an Admission Department and six specialty services, head and neck, thoracic, general surgery, gynecology, genito-urinary and lymphoma. All new patients are given a complete examination as well as complete blood count, urinalysis, chest x-ray and Mazzini test. Following these studies the patient is referred to one of the appropriate six specialty clinics. Whenever possible referring doctors are asked to send x-ray films and microscopic slides with their patients at the time of the initial visit to the clinic. These are returned to the referring physician after they have served their purpose.

This clinic has been established in accordance with the principles initiated by the New Jersey Division of the American Cancer Society and approved by The Medical Society of New Jersey.

Indigent patients will be accepted for diagnosis and treatment without charge. A complete report of the findings in each case will be sent to the referring physician upon completion of our studies.

Private patients of independent financial means will be accepted for diagnostic study only. Upon completion of the diagnostic study the patient will be referred back to his private physician with a detailed account of our findings and recommendations for definitive therapy. Fees charged for the services rendered will be proportionate to the patient's income and commensurate with existing private practice rates.

All patients will be seen by appointment only. The note of referral must be in the clinic's possession prior to the initial visit to the Admission Department.

COUNTY SOCIETY REPORTS

ATLANTIC COUNTY

Leonard B. Erber, M.D., Reporter

A regular meeting of the *Medical Society of Atlantic County* was held at the Traymore Hotel, March 13, Dr. R. D. Harley, presiding.

The guest speaker was Dr. David Cayer, Assistant Professor of Medicine, Bowman-Gray Medical School. His topic, "The Differential Diagnosis of Jaundice," was an excellent presentation of a subject of wide interest in many fields of medicine. His paper was discussed by Drs. Gleason, Kamen, Hyman, Shavelson and Ackerman, and Dr. Cayer concluded with a comprehensive summary of the discussion.

Reporting for the Committe for the Conservation of Vision, Dr. Diskan commented on the relatively high frequency of glaucoma. He stated that although all glaucoma cases will show deterioration, only about 5 per cent will deteriorate in those instances where early diagnosis is made. He further stated that the committee was of the opinion that a glaucoma campaign would be a valuable public relations feature and accordingly moved that the society endorse a glaucoma survey to be carried out by his committee some time within the next two months (adopted).

Dr. Nickman reported that a liaison committee will be organized at a state level with the Bar Association and the Medical Society. He added that a similar set-up on a local or county level would certainly be a forward step in harmonizing relationship between the medical and legal professions.

Dr. Gleason reported briefly on the present status of health and accident insurance.

Dr. Gross reminded members of the Society that it is a public health regulation that inactive cases of pulmonary tuberculosis who become reactivated, must again be reported.

Dr. Herbert Axilrod was granted a leave of abfor the duration of his service in the U. S. Air Force.

A regular meeting of the *Medical Society of Atlantic County* was held at the Traymore Hotel, April 10, Dr. R. D. Harley, presiding.

The guest speaker was Dr. Paul Hock, Assistant professor of Psychiatry, College of Physicians and Surgeons, Columbia University. His subject was "Indications for the Selection of Psychiatric Treatments."

Dr. Harley announced that a presentation of symbolic awards to all past presidents will take place on May 2.

The Board of Censors approved for membership the following applications: Associate—Dr. Philip H. Hover; Regular—Drs. Ralph E. Ruppert and Morton W. Leach.

Captain Mulloy of the Atlantic City Police Department, spoke to the society about the parking privileges and responsibilities of doctors.

In a report on the status of malpractice insurance, Dr. Gleason stated that he had received assurance from a state level that our present protection would continue without change, and strongly advised against any change in company.

The professional liability contract which this society had carried for the protection of the society against suits for damages from libel, slander or defamation of character, has been cancelled by the insurance carrier. Dr. Gleason stated that he had been unable to place this type of insurance with any other company. Dr. Allman recommended interim financial backing by the society, until such insurance is obtained. This was approved.

BURLINGTON COUNTY

William F. Betsch, M.D., Reporter

A regular meeting of the *Burlington County Medical Society* was held at the Riverton Country Club on March 12. The meeting was called to order by Arthur B. Peacock, M.D., President.

Guest speaker was Joseph Stokes, Jr., M.D., Professor of Pediatrics, University of Pennsylvania School of Medicine. Dr. Stokes discussed his recent studies on prevention of poliomyelitis.

The *Burlington County Medical Society* held a regular meeting on April 9 at the Riverton Country Club. President A. B. Peacock, M.D., officiated.

The scientific session consisted of a "Home Talent "Program" with the following papers being presented by members of our Society:

"Resuscitation of the Newborn." Robert A. Murphy, M.D.; "Civil Defense." R. Winfield Betts, M.D.; "Office Management of Diabetes Mellitus." Perry S. MacNeal, M.D.

CAMDEN COUNTY

James P. Harbeson, III, M.D., Reporter

With Dr. Martin Collier, President, in the chair, the regular monthly meeting of the *Camden County Medical Society* was held on April 7 in the Camden County Dispensary Building.

Drs. Jacob Lippincott, Alfred Conston and Ronald Bernardin were introduced to the Society following their unanimous election.

The speaker of the evening, Dr. Edward Weiss, clinical professor of medicine at Temple University, spoke on psychosomatic aspects of heart disease and essential hypertension.

Dr. Harold Barnshaw announced the annual Camden County Society outing to be held on June 9 at the Tavistock Country Club in Haddonfield. There will be the usual dinner following an afternoon of golf.

CUMBERLAND COUNTY

The April meeting of the *Cumberland County Medical Society* was held at the Kimble Glass Co., Vineland, on April 14, DR. NORMAN HENRY presiding.

The following officers were elected:

President—DR. KURT M. HANSEN, Millville; Vice President—DR. FRANK J. T. AITKEN, Bridgeton; Treasurer—DR. NICHOLAS MARCHIONE, Vineland; Secretary—DR. MARY BACON, Bridgeton; Reporter—DR. GEORGE F. RISI, Millville.

A panel of doctors from Jeanes Hospital, Philadelphia, consisting of FREDERICK A. BOTHE, FREDERICK O. ZILLESSEN, SAMUEL BLANK, anesthesiologist; ROY R. GREENING, radiologist, discussed malignancy of the oral cavity.

GLOUCESTER COUNTY

Louis K. Collins, M.D., Reporter

DON B. WEEMS, M.D., presided at the regular monthly meeting of the *Gloucester County Medical Society* at the Woodbury Country Club, March 19.

The speaker of the evening was CHARLES P. BAILEY, M.D., Professor of Thoracic Surgery at the Hahnemann Medical College, Philadelphia, Pa. He discussed recent advances in cardiac surgery.

The Legislative Committee, I. N. PATTERSON, M.D., chairman, reported on the present status of the proposed chiropractic legislation, and also discussed the proposed Cabinet post of Secretary of Health, Welfare, and Social Security which seemed destined to become a reality. The present plan with medical advisers meets with the approval of the American Medical Association.

DON B. WEEMS, M.D., presided at the April 16 meeting of the *Gloucester County Medical Society* at the Woodbury Country Club. "Office Psychiatry" was the topic discussed by H. CRAIG BELL, M.D., Associate in Neurology at the University of Pennsylvania Graduate School of Medicine.

DR. WEEMS appointed the nominating and audit committees. DR. BROWER, Treasurer stated that nine members had not yet paid their dues.

I. N. PATTERSON, M.D., reporting for the Legislative Committee, stated that the chiropractic bill seemed to be buried for the time being.

A motion was adopted that a resolution be introduced to the House of Delegates concerning the abolition of the office of executive secretary of the Legislative Committee with its funds to be used to augment the activities of the legislative analyst.

MIDDLESEX COUNTY

Harold V. Cano, M.D., Reporter

The regular monthly meeting of the *Middlesex County Medical Society* was presided over by DR. CARLYLE MORRIS, the president, at the Roosevelt Hospital, Metuchen, March 18.

DR. WILLIAM TOTH of Fords was elected to Regular from Associate membership, and DR. FRANCIS L. STEINMAN, Stelton, was elected to membership on transfer from the Medical Society of the County of Kings.

The Committee on Service for the Chronically Ill recommends that the county society publicly assume leadership in the creation of a committee composed of allied professional, lay and welfare agencies in the county.

DR. SLOBODIEN, reporting for the Medical Liability and Insurance Committee, stated that there had been no essential change in the number of applications received for hospitalization insurance.

Dr. Norman Reitman introduced the guest speaker of the evening, DR. ISRAEL STEINBERG, Assistant Professor of Medicine and Radiology, Cornell University Medical College, whose subject was: "Newer Advances in Angiocardiography in Lung and Heart Disease."

MONMOUTH COUNTY

Sidney M. Hodas, M.D., Reporter

A symposium on infertility featured the regular monthly meeting of the *Monmouth County Medical Society*, held at the Monmouth Memorial Hospital, Long Branch, on February 25, with DR. ANTHONY J. DEVITA, President, in the chair.

DR. CHARLES LEE BUXTON, Associate Attending Obstetrician and Gynecologist, Columbia Presbyterian Medical Center, New York, spoke on the "Practical Approach to the Problem of Infertility in Females." DR. LOUIS PORTNOY, Mt. Sinai Fertility Clinic, New York, discussed the "Practical Approach to the Problem of Infertility in Males." Discussants of the presentations were DRS. JOHN C. CLARK and HAROLD C. RUBIN.

The main business of the evening was election of the following officers for the coming year: *President*, DR. GEORGE J. MCDONNELL; *President-Elect*, DR. HOWARD C. PEIPER; *Secretary-Treasurer*, DR. LESTER A. BARNETT; *Assistant Secretary-Treasurer*, DR. SIDNEY M. HODAS; *Reporter*, DR. MORTON F. TRIPPE; *Executive Committee*, DR. VICTOR KNAPP, DR. FRANK P. PIGNATARO and DR. MARTIN R. RUSH; *Judicial Committee*, DR. KENNETH G. BROWN; *Representative to District Judicial Council*, DR. STEPHEN R. CASAGRANDE; Delegates and alternates to the State Society were also elected.

DR. WILLIAM L. WOOD of Red Bank was elected to Active membership; and DRS. PETER R. BRADY of Highlands and MORRIS S. WEISS of Asbury Park were elected as Associates.

It was announced that the next meeting on March 25 would be a joint dinner meeting of the Society with the Monmouth County Dental Society and the Monmouth-Ocean County Pharmaceutical Society.

MORRIS COUNTY

Albert Abraham, M.D., Reporter

The *Morris County Medical Society* held its regular meeting on March 19, at the Chilcott Laboratories, Morris Plains. There was a short business meeting.

Dr. T. R. Failmezger moved the county delegates be instructed to investigate the matter of automobile licenses at the next state society convention in May 1953. Certain individuals, not holding an M.D. degree recognized by the state board of medical examiners, have nevertheless secured M. D. license plates. This motion was passed.

Dr. G. B. Kuite related his recent experience with a narcotic addict in this vicinity and placed

all the members on the alert with regard to the individual concerned.

Dr. Sylvan Moolten was the guest speaker. Dr. Moolten, pathologist at St. Peter's and Middlesex Hospitals in New Brunswick, addressed the society on "Mechanisms of Thrombosis".

The *Morris County Medical Society* held its regular April meeting at the Chilcott Laboratories in Morris Plains, on April 16.

The speaker of the evening was Dr. Howard C. Taylor, Jr., Professor of Obstetrics and Gynecology, Columbia University, who addressed the society on functional gynecologic conditions.

Dr. Taylor discussed steroid therapy in functional gynecologic conditions, and outlined criteria for judgment of the value of these preparations. He also discussed in some detail the relation of the autonomic nervous system to these functional conditions.

PASSAIC COUNTY

David B. Levine, M.D., Reporter

The regular monthly meeting of the *Passaic County Medical Society* was held at the Medical Society Building on February 17. Dr. Joseph M. Keating, the President, presided.

Louis Serafini, M.D., Paterson, was elected to Associate membership.

Dr. Lawless introduced Seymour Schotz, M. D., Chief, Department of Anesthesiology, Presbyterian Hospital, Philadelphia, whose topic was "Sudden Cardiac Arrest—Etiology and Therapy". Dr. Hayman was the principal discusser of Dr. Schotz' paper, with Doctors VanderBush and Charles Hall and others taking part in the discussion.

The regular monthly meeting of the *Passaic County Medical Society* was held at the Medical Society Building on March 17. Dr. Joseph M. Keating, the president, was in the chair.

Elected to Courtesy membership was Reginald Farrar, Jr., M.D., Passaic.

Dr. Thron reported on the status of two Chiropractic Bills presently before the State Legislature. He also reported on H.R. 10, a proposed bill providing for tax-exempt voluntary pension plans.

Dr. Keating reported to the membership on the results of a questionnaire concerning a County Fee List. It was pointed out that separate fee lists for specialists were contemplated, which had not been mentioned in the original questionnaire letter.

Dr. Keating introduced the speaker for the evening, Harry Gold, M.D., Professor of Clinical Pharmacology, Cornell University Medical College. Dr. Gold's topic was "Clinical Methods for the Evaluation of New Drugs".

SALEM COUNTY

J H. Fishbein, M.D., Reporter

Under the chairmanship of its president, Dr. John S. Madara, the regular monthly meeting of the *Salem County Medical Society* was held at the Du-Pont-Pennsgrove Country Club on March 20.

Dr. Julian Johnson of The University of Pennsylvania spoke on "Diagnostic Problems of Pulmonary and Mediastinal Tumors". Interesting aspects of lung cancer were described.

Dr. Eugene Pashuck was approved as a member in the Society by unanimous vote.

May 16 was set as the date for the annual shad dinner at The Salem Country Club.

UNION COUNTY

Merton L. Griswold, Jr., M.D., Reporter

The 84th Annual Meeting of the *Union County Medical Society* was held at the White Laboratories, Kenilworth, on April 8. White Laboratories was host to the Society at the dinner preceding the meeting. Dr. Harrold Murray and Dr. Henry B. Decker, President and President-Elect of the State Society, respectively, were present. The highlight of the evening was the presentation of scrolls to 25 past-presidents of the Society.

Elected to membership were: Robert M. Cunningham, Matilda L. Davis, and Edward Kogan, Elizabeth; Harry J. Robinson, Rahway; and Irving Zuckerberg, Linden.

The following officers were unanimously elected: President—William H. McCallion, President-Elect—Edward G. Bourns, First Vice-President—Carl G. Hanson, Second Vice-President—George W. H. Horre, Secretary—Nathan S. Deutsch, Treasurer—Henri E. Abel, Reporter—Merton L. Griswold, Jr.

The retiring president, Dr. Satulsky, gave his report for the year, and expressed the hope that the Society consider the acquisition of suitable quarters to care for our expanding needs.

NEW JERSEY DERMATOLOGICAL SOCIETY

At the annual meeting of the *New Jersey Dermatological Society*, held at the Academy of Medicine, on May 12, the following officers were elected for the coming year (1953-54): President, Frederick C. Licks, M.D., South Orange; Vice President, Emanuel M. Satulsky, M.D., Elizabeth; Secretary, Seymour L. Hanfling, M.D., East Orange; Treasurer, Harry C. Goldberg, M.D., Plainfield.

RADIOACTIVE GOLD AVAILABLE

The Radioisotope Department of the Newark Beth Israel Hospital announces that it now has available radioactive gold for the treatment of pleural effusion and ascites associated with metastatic carcinomas. Radioactive iodine, phosphorus and strontium have been used in this department for the past two years.

Inquiry concerning the application of these agents should be addressed to the department at 201 Lyons Avenue, Newark.

WOMAN'S AUXILIARY

MRS. FRANK S. FORTE, PRESIDENT 1943-54

Mrs. Frank S. Forte, a native of Philadelphia, Penna., is a graduate of its public schools and the Palmer Business Institute. She is a charter member of the Woman's Auxiliary to the International College of Surgeons, and a member of the following organizations: The Woman's Club of Orange; The Contemporary Club of Newark, having been its Health and Civics Chairman; The Auxiliary to the Newark Eye and Ear Infirmary; The New Jersey Council of Local Health Services; and the Public Relations Committee of the New Jersey Health and Sanitary Association.

Mrs. Forte has been active in the Auxiliary to the Essex County Medical Society for many years and served as its president in 1946-47. She has served the State Auxiliary as Corresponding Secretary, Safety Chairman, Director, Vice President, Program Chairman, and Conference Chairman in 1952.

Dr. and Mrs. Forte have one daughter, Alice-Marie. She is a graduate of The Beard School in Orange.

Dr. Forte is an attending proctologist at St. Michael's Hospital, Presbyterian Hospital, and chief of "B" Service of Newark City Hospital. He has served as chairman of the Public Relations Committees of The Medical Society of New Jersey and the Essex County Medical Society, of which he is now President-Elect.



AUXILIARY REPORTS

Atlantic County

Mrs. Harry Goodman, Chairman of Press and Publicity

The regular meeting of the *Woman's Auxiliary to the Medical Society of Atlantic County* was held March 13 at the Traymore Hotel. Mrs. F. Rolfe Westney, president, presided.

Mrs. Samuel Salasin, program chairman for the evening, introduced Dr. Martin Green, well known pediatrician, who spoke on "Child Safety In The Home."

The second speaker was Chief Edward Mulvihill and his son James. Chief Mulvihill is the drill master of the Atlantic City Fire Department. The group was shown two sound films on Fire Prevention.

The *Woman's Auxiliary to the Medical Society of Atlantic County* held their regular meeting April 10 at the Traymore Hotel.

Mrs. G. Ruffin Stamps read the proposed revisions of the constitution and the by-laws.

Mrs. J. Neafie Richardson, program chairman for the evening, introduced Mrs. Doris Penkethman of the Dairy Council of Philadelphia, who stressed the need for the seven basic foods for good nutrition and health. Mrs. Penkethman showed many interesting kitchen devices including unusual cookie cutters, flour sifters, meat basters, stuffing cases and shrimp deveiners.

Camden County

Mrs. George W. Hager, Jr., Publicity Chairman

The *Woman's Auxiliary to the Camden County Medical Society* held their twenty-sixth public relations meeting on March 24 at the Haddon Fortnightly, Haddonfield. Mrs. Arthur L. Stone presided. Dr. Martin H. Collier, president of the Camden County Medical Society, extended greetings.

The program, planned for the public, outlined

the problems and offered suggestions for the home care of the chronically ill.

Dr. Johannes F. Pessel, Trenton, chairman of the governor's committee on the chronically ill, spoke at the morning session. Taking part in the discussion were Dr. Harold K. Eynon, Haddonfield, and Dr. Reuben L. Sharp, Masonville.

Following luncheon, Mrs. Thomas F. Delaney of Newark, director of the Essex County service for the chronically ill, discussed "The Essex County Home Care Program".

Miss Mabel Chrystie, Westmont, director of the Camden Visiting Nurse Association, spoke on the role of the public health nurse. A summary was presented by Mr. Arthur C. Calvin, Collingswood, executive secretary of the Camden County Council of Social Agencies.

Cape May County

Mrs. LaRue S. Yingling, Publicity Chairman

Mrs. Carl Records of Cape May, president of the *Woman's Auxiliary to the Cape May County Medical Society,* presided at the regular meeting on March 17, at the old Court House Building, Cape May Court House.

The group, together with the Medical Society of Cape May County, is offering a Nurses Scholarship to a girl or boy in Cape May County, to be selected on merit. The Auxiliary held a special meeting at the Old Court House Building on April 22 to acquaint those who are interested in the nursing profession. A professional film was shown and a registered nurse spoke and answered questions. Applications are available at all county high school principals' offices.

Cumberland County

Mrs. E. C. Green, Chairman, Press and Publicity

Dr. Henry B. Decker, President-Elect of the Medical Society of New Jersey, was the guest speaker at the April luncheon meeting of the *Woman's Auxiliary to the Cumberland County Medical Society,* held at the American Legion Home in Millville, April 2.

Dr. Decker reviewed the history of university education in New Jersey and discussed plans for the new state medical-dental school; he urged the auxiliary to back this important project.

Essex County

Mrs. Louis L. Covino, Chairman, Press and Publicity

The *Woman's Auxiliary to the Essex County Medical Society* held their Annual Arts and Hobbies Day on March 23, at the Griffith Auditorium, Newark. The program, which followed the regular monthly meeting, was under the direction of Mrs. A. B. Iannone, Mrs. A. J. Biunno and Mrs. Frank Bellucci. A one-act comedy, "The Culture Club", was presented to a large and enthusiastic audience.

Mrs. William P. Nemzek entertained with several piano selections.

Following the play, hobbies were viewed. There was a great variety, including oil paintings, dolls, ceramics, hand-knitted dresses, bags and afghans.

On Friday, April 10, our Auxiliary informed the public about our nurse recruitment and scholarship program over WAAT.

Hudson County

Mrs. Moses Dolganos, Chairman, Press and Publicity

The annual Scholarship Dessert Bridge and Fashion Show given at Murdoch Hall, Jersey City Medical Center on February 14 was very well attended. The address of welcome was given by Mrs. Albert Lepis, president.

The 'open house' meeting on March 2, which featured a Public Relations Day program, was very successful. The entire program was devoted to "Nurse Recruitment." The speakers were Dr. Harry Perlberg, president of the Hudson County Medical Society; Miss Ann Murphy, Director of Nursing Services, Jersey City Medical Center; Miss Winifred Walsh, Director of Public Health Nursing Services, Jersey City; and Mr. James Hudson, Assistant Director of Nurses, Jersey City Medical Center.

About four hundred students from the public and parochial schools were in attendance. The audience seemed very enthusiastic and interested. Homemade refreshments were served to all.

At the regular monthly meeting on April 6, the annual election of officers took place.

The new officers are as follows:

President—Mrs. William Loori, President-Elect —Mrs. Moses Dolganos, First Vice-President—Mrs. James Murphy, Second Vice-President—Mrs. Paul Miranti, Recording Secretary—Mrs. James Tsucalas. Treasurer—Mrs. Harry Perlberg.

Somerset County

Mrs. C. Edwards Case, Jr., Chairman, Press and Publicity

A student loan fund available to all Somerset Hospital School of Nursing undergraduates has been st up by the *Woman's Auxilary to the Somerset County Medical Society.* The loans, repayable within two years after graduation, will be granted to students for any purpose associated with their school activities as well as for tuition needs. The initial project for the new loan fund was a dance on May 9. The Nurse Recruitment Committee also held a Nurse's Club Day at the Somerville High School at which time 200 pieces of literature were distributed in cooperation with the health department of the local high school.

Union County

Mrs. Henry G. Dudley, Chairman, Press and Publicity

The annual meeting of the *Woman's Auxiliary to the Union County Medical Society* was held April 28. Mrs. Robert A. Yuckman presided. The following officers were elected:

President: Mrs. Edward A. MacDonald, Roselle Park; vice-president: Mrs. Roy T. Forsberg, Roselle; second vice-president: Mrs. Walter S. Booth, Elizabeth; recording secretary: Mrs. J. E. L. Imbleau, Union; corresponding secretary: Mrs. Joseph Judd, Elizabeth; Treasurer: Mrs. Austin J. Tidaback, Plainfield.

Mrs. MacDonald stated that the main projects for the year were the student nurse scholarships and the homemaker service. Mr. Gordon Pryor spoke on "Ceramics As A Hobby."

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Dermatology—Essentials of Diagnosis and Treatment. By M. B. Sulzberger, M.D., Professor and Chairman, Department of Dermatology and Syphilology, and J. Wolf, M.D., Associate Professor of Clinical Dermatology and Syphilology, New York University Post-Graduate Medical School. Pp. 592. Chicago, The Year Book Publishers, Inc. 1952. ($10.00)

This is a new edition of the well-known *Dermatologic Therapy in General Practice* by the same authors. The supply of the third edition had been exhausted within 3 years and the authors felt that progress in dermatology and syphilology demanded a new and revised text at this time. A more definitive title has now been given the work and the format enlarged. All but two of the excellent black and white pictures and tables of the previous edition have been kept. The addition of eight color plates enriches the book with 21 life-like pictures of dermatologic conditions. These are reproductions from the photographic collection of the Department of Dermatology and Syphilology, New York University Post-Graduate Medical School and Skin and Cancer Unit, University Hospital.

The chapter on systemic and topical treatment of pyoderma has been revised. The use of newer antibiotics is evaluated advocating the use of those topically which are usually not used systemically. This will prevent sensitization and thus avoid allergic reactions against antibiotics in systemic use.

The chapter on the use of ACTH and cortisone in dermatology is new. It is written with stimulating guidance and yet with the essential restrictions, cautions and thorough care of the experienced experimental scientist conscious of his responsibility to both his readers and patients. The ascertained facts as to indication and contraindication, dosage and effects are listed in two tables. Untoward reactions are described. The closing paragraph outlines challenging ideas on future steroid research and therapy, one of which—the topical use of compound F—has proved effective in the interim since the book went to press.

Unqualified attention is called to the successful use of atabrine in both chronic discoid and acute disseminated lupus erythematosus as reported by Francis Page of Great Britain. It seems appropriate to mention in this review that the usefulness of atabrine medication has been confirmed in chronic discoid lupus erythematosus while its ineffectiveness and even harmful effects has been observed when used in the acute and subacute disseminated form of the disease.

The chapters on syphilis have been revised. Material on bismuth and arsenical treatments has been eliminated as these forms of treatment are obsolete. Prophylactic treatment of persons known to have had intimate contact with partners having acute contagious syphilitic lesions is advised. Antibiotics other than penicillin are discussed in relation to their antiluetic action because their use is important in case of penicillin sensitization. The use of ACTH in gastric crisis or lancinating pain is mentioned.

While reporting these changes and improvements it must not be forgotten that the book contains, in addition, the time proved essentials of dermatologic and syphilologic diagnosis, and management of the common important dermatoses and syphilis seen both in general and dermatology practice. It is fluently written and arranged in the best possible didactic way. The book has been thoroughly revised. The illustrations both old and new, the formulary and therapeutic details of physio-, chemo- and ray therapy and dermatologic surgery have proved to be of invaluable assistance to the general practitioner who needs just such a book. It will instruct the medical and postgraduate student in the field and will make refreshing reading for the experienced dermatologist.

Otto B. Hitschmann, M.D.

Physiologic Therapy For Obstructive Vascular Disease. By Isaac Starr, M.D. New York, Grune and Stratton, 1953. Pp. 38. ($2.50)

Subscribers to *Circulation*, the official journal of the American Heart Association, will recognize this monograph as a reprint of the George E. Brown Memorial Lecture which appeared in the November 1952 issue. In that lecture Dr. Starr reviews progress in peripheral vascular diseases of the past 25 years, drawing largely from his own personal investigations and clinical experiences. He surveys the field of local and general treatment, of drug and surgical management, all with reference to the underlying physiology.

To this reviewer, the price of this small volume seems exorbitant. Containing only 30 pages of text, the price per page is a little over six cents. An interested student of this subject might do better to write directly to the author for a free reprint of the original article.

R. D. Goodman, 2d, M.D.

Standard Values in Blood; being the first fascile of a Handbook of Biological Data prepared under the direction of the Committee on the Handbook . . . American Institute of Biological Sciences, The National Research Council. Ed. by Errett C. Albritton, A.B., M.D., Fry Professor of Physiology, The George Washington University. Pp. 199. Phila., W. B. Saunders Co., 1952. ($4.50)
(Published under the auspices of the American Institute of Biological Sciences, The National Research Council.)

Ostensibly published as a reference volume for analytical values in the blood of both man and other animals, this publication far exceeds this relatively limited value. It serves three separate groups of functions, a reference book in hematology, a source of coordination and interpretation of

various analytical methods and a very complete bibliography in hematologic technic.

Two sections warrant particular attention, those on blood coagulation and on the effects of radiation. The diagrammatic portrayal of the various extremely complicated theories of blood coagulation reduces these complications to a minimum. The section on radiation effects should be a source of great interest to the many investigative and clinical groups interested in both the therapeutic and toxic effect of ionized radiation and in the studies on protective measures in the therapeutic use of radiation therapy.

LESTER M. GOLDMAN, M.D.

Poisoning; a Guide to Clinical Diagnosis and Treatment. By. W. F. von Oettingen, M.D., National Institute of Health, U. S. Public Health Service, Federal Security Agency, Bethesda, Md. Pp. 524. New York, Paul B. Hoeber, Inc., 1952. ($10.00)

With the rapid expansion of industrial chemistry there has developed a need for a treatise which makes available pertinent information concerning the diagnosis, treatment and prognosis of the various types of chemical poisoning. Dr. von Oettingen's book has met this need.

The book is divided into four parts. Part I is concerned with the classification of poisonings, the medico-legal responsibilities of the physician, emergency measures and equipment for treatment of cases of poisoning. Part II is concerned with diagnosis and includes a symptoms diagnosis section which is very helpful in localizing the type of poisoning which may be involved. In this part there is a section on laboratory tests which indicates the type of laboratory work-up necessary to confirm the diagnosis.

Part III deals with the management and treatment of poisonings. Part IV lists the poisons alphabetica'ly and discusses the specific symptomatology and treatment of each.

This book is a "must" for every physician who practices in an industrial community or is called into consultation in cases of industrial diseases. It should be on the shelf of every industrial plant medical department and every physician employed by an industrial plant. It should be available to all physicians as a reference book.

ASHER YAGUDA, M.D.

Electrocardiography in Practice. By Ashton Graybiel, M.D., Captain, Medical Corps, U. S. Navy; Paul D. White, M.D., Executive Director, National Advisory Heart Council; Louise Wheeler, A.M., Executive Secretary, The Cardiac Laboratory, Massachusetts General Hospital; Conger Williams, M.D., Instructor in Medicine, Harvard Medical School. 3d ed. 378 pages with 294 figures. Philadelphia and London, W. B Saunders Co., 1952. ($10.00)

Six years have elapsed since the publication of the second edition of this book. The present volume continues to have as its main purpose an atlas containing many electrocardiograms primarily for the practitioner of medicine. The monograph has been entirely rewritten and summarizes the present status of the unipolar leads; it also contains an epitome of the attempts to apply vectorcardiography to clinical practice.

The volume is divided into eight parts. Part I presents the history and development of clinical electrocardiography. Part II is concerned with methodology. Part III considers the normal electrocardiogram and its variations. Part IV is devoted to disorders of rhythm and conduction. Part V deals with alterations produced by drugs and chemicals. Part VI, the longest in the book, illustrates the records obtained in the different etiologic types of heart disease. Finally, Part VIII contains electrocardiograms for practice in interpretation.

This book is well organized and is well written for easy reading. It is profusely illustrated with multiple tracings and figures. This treatise will be useful to all physicians who are interested in heart disease.

EDWARD C. KLEIN, JR., M.D.

Back Down the Ridge. By W. L. White. Pp. 182. New York, Harcourt, Brace and Company, 1953. ($3.00)

This is the story, by a war correspondent, of the U. S. Army Medical Service in Korea. It traces in detail the progress of about a dozen wounded soldiers, mostly combat infantrymen, from the time they "get clobbered" until, months later, back in the States, they have become as fully rehabilitated as it is possible for them to be. The title refers to the heroic efforts of the front-line medics in getting them "back down the ridge" to the battalion aid station alive.

Although he has written numerous successful books, Mr. White wisely decides to let each soldier tell his story in his own language. As a result the reader gets a litter-level view of the process of evacuation and care, and with it an authentic account of this strange war in Korea. Doctors and nurses are also given an opportunity to tell, in their own language, of some of the newer advances in Medical Field Service, improvements which already have reduced the death rate of the wounded to about 50 per cent of that of World War II. This means that our soldiers, those of our allies, and even some of our enemies, are receiving the best medical care in the history of warfare.

Considerable attention is given to the MASH (Mobile Army Surgical Hospital) which furnishes full surgical facilities at the division clearing station—just beyond the range of enemy artillery. Much stress is also placed on the use of blood, plasma, and dextran in shock prevention, and a new plastic bag is described for giving rapid pressurized transfusion in desperate cases.

An abridgment of this book appeared in February "Reader's Digest" with a footnote by General Omar Bradley in an appeal for more blood donors.

Although neither a medical nor a military book, it contains much of interest to both groups. The purpose is not to furnish entertainment but to present honestly some of the hard realities of our times. I believe that it will come to be recognized as one of the most significant books of the Korean War.

RAY M. FREEMAN, M.D.

TUBERCULOSIS

ABSTRACTS

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Vol. XXVI. June, 1953 No. 6

APPRAISAL OF PROTECTIVE VALUE OF BCG VACCINE

By Joseph D. Aronson, M.D., and Charlotte F. Aronson, A. B., Journal of the American Medical Association, May 24, 1952.

The logical approach to the development and evaluation of a specific immunizing agent against tuberculosis requires not only an understanding of the fundamentals of immunity but an appreciation of the factors that make such an evaluation difficult. Such factors include variations in the biology of the tubercle bacillus, the susceptibility of the host, the pathogenesis of the disease, the degree of exposure, social and economic factors, and an almost universal decline in the morbidity and mortality from tuberculosis.

At the present time there is almost general acceptance that some degree of increased resistance follows a primary infection. The immunity in tuberculosis is not as complete as the immunity following such a bacterial disease as typhoid or the immunity following certain virus infections and tends to decrease with the disappearance of viable tubercle bacilli.

The impracticability of using viable virulent tubercle bacilli in man to induce resistance and the inconclusive results following the use of nonviable tubercle bacilli have led to widespread investigations of the value of viable, attenuated cultures of tubercle bacilli as immunizing agents. One of the most widely used of such cultures has been the BCG culture of Calmette and Guerin.

The BCG culture originated from a virulent, bovine type tubercle bacillus isolated in 1902. This culture was attenuated by long-continued transplantation on potatoes impregnated with beef bile and glycerine. This attenuated strain has retained the cultural, tinctorial, antigenic, and tuberculogenic properties of the original culture, but has lost the ability to produce progressive tuberculosis in animals as susceptible as the guinea pig or in man.

BCG vaccine was first used in France in 1921. Since then approximately 50 million persons of various ages living in different parts of the world, some under the most adverse and primitive conditions, have received the vaccine. The diversity of opinion regarding its value has been due, in great part, to the lack of adequately controlled investigations and to the difficulty of dissociating the protective role of BCG vaccine from an almost universal decrease in the morbidity and mortality from tuberculosis, antedating the use of BCG vaccine.

In order to appraise as objectively as possible the speicfic value of BCG vaccine in control of tuberculosis, a joint investigation was undertaken by the Henry Phipps Institute, University of Pennsylvania, and the Branch of Health, Bureau of Indian Affairs, Department of the Interior. This study was initiated in December, 1935, and it was not until February, 1938, that all of the injections of BCG vaccine and saline solution were completed in the different areas.

This investigation was conducted in five different geographical areas and included eight different tribes. These agencies and communities are widely scattered, and the inhabitants live under greatly differing climatic conditions. They vary in their dietary habits and represent different social and cultural patterns. In general, their economic condition is low, housing poor, and homes overcrowded. Excellent cooperation was obtained from the Indians throughout the study.

The initial phase of the study consisted of de-

termining the mortality and morbidity from tuberculosis and the incidence of tuberculous infection in the general population. The incidence of tuberculous infection as determined by the tuberculin test varied little on the different agencies. The mortality rate fom tuberculosis on the Indian reservations studied ranged from 200 to 300 per 100,000, while the mortality rate in Alaska ranged from 500 to 600 per 100,000.

The morbidity from tuberculosis was determined by roentgenologic examination of the chest of an unselected sample of the population. Pulmonary lesions compatible with a diagnosis of tuberculosis ranged from 1.1 per cent of those examined roentgenologically on the Pima Agency, Arizona, to 6.9 per cent among those living in southeastern Alaska. Data compiled by the Tuberculosis Control Unit of the Indian Service, indicated a high incidence of tuberculous infection and disease.

The group to be included in the evaluation of BCG vaccine was next selected. School and preschool age children, all of whom were negative to 0.00002 mg. and 0.005 mg. of purified protein derivative (PPD) tuberculin, were placed by an alternate division of cards into one of two groups. These groups were comparable in numbers, age, and sex. One group received a single intracutaneous injection of freshly prepared BCG vaccine and were not revaccinated during the study. The second group received an intracutaneous injection of isotonic sodium chloride solution and served as controls. Neither group was isolated before or after vaccination, and no change was made in their mode of living. Both groups were examined annually by means of X-ray and tuberculin tests for from nine to eleven years.

The mortality from all causes and from tuberculosis was again determined 15 years after the study was initiated. The cause of death was based on roentgenologic and laboratory examinations, clinical records, nurses' notes, and personal interviews with relatives in those few cases in which diagnosis had not been established. In no instance was the death certificate diagnosis accepted without further careful investigation. During the 13 to 15 years of observation a total of 17 vaccinated and 128 controls died from all causes. Among the 1,551 vaccinated persons observed for a total of 21,245.5 person years, 12 died from tuberculosis, a rate of 0.56 per thousand person years of observation. Among the 1,457 controls observed for a total of 19,520.5 person years, 65 died from tuberculosis, a rate of 3.32 per thousand person years. Among the vaccinated persons and controls 59 and 63, respectively, died from nontuberculous causes. Of the 12 deaths from tuberculosis among the vaccinated group, six were due to pulmonary tuberculosis, and six to nonpulmonary forms. Of the 65 unvaccinated controls who died from tuberculosis, 32 died from pulmonary tuberculosis, 31 from acute miliary or similar forms of tuberculosis including tuberculous peritonitis, and two from bone and joint tuberculosis. The vast majority who died from generalized tuberculosis had been negative to tuberculin within the year of death or had become positive for the first time within that period.

The observed data over a period of 13 to 15 years support the concept that there is a close but not absolute relationship between resistance to reinfection and hypersensitivity. Hypersensitivity among the vaccinated, of whom 12 died from tuberculosis, ranged from 93.3 per cent one year following vaccination to 90.2 per cent 11 years later. Among the unvaccinated controls, 65 of whom died from tuberculosis, hypersensitivity increased from an incidence of 12.7 per cent one year after the initiation of the study to 41.7 per cent after 11 years.

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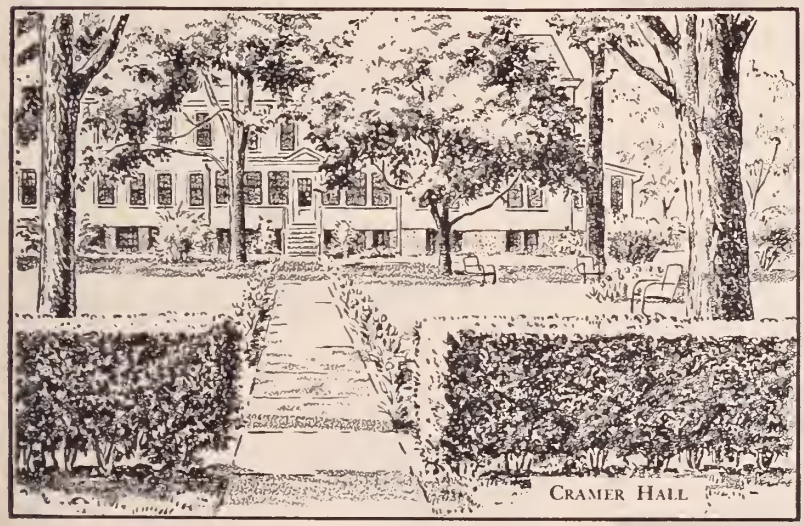
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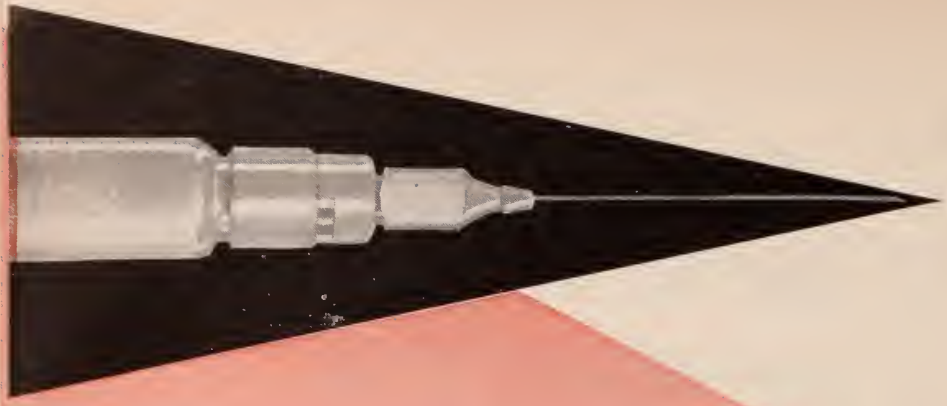
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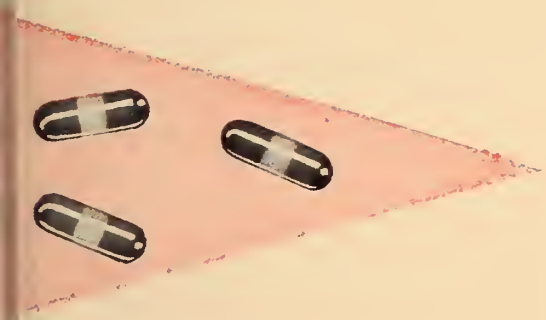


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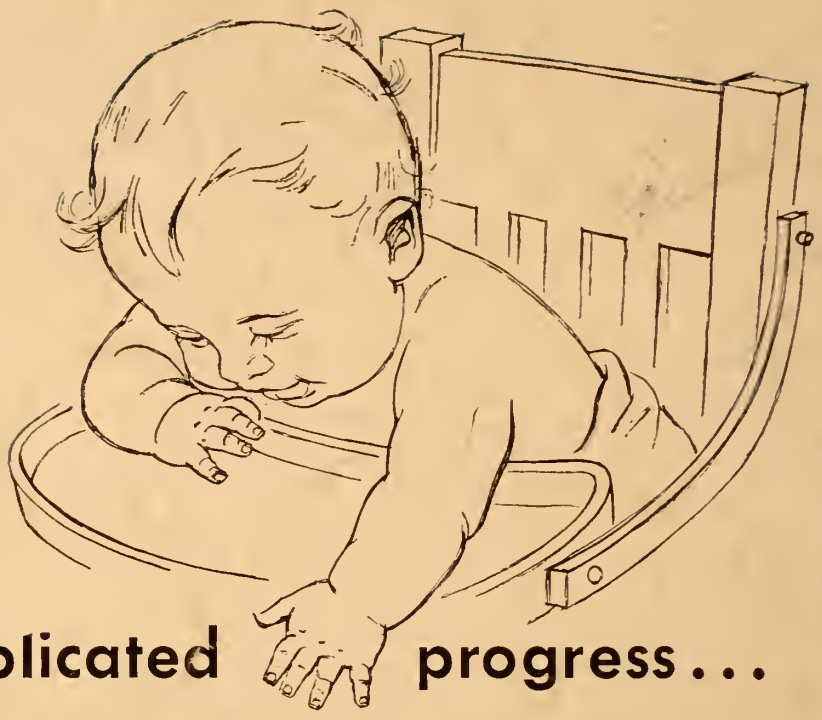


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LIBRARY

CONTENTS—Pages 287 to 324

EDITORIALS— Page

HENRY A. DAVIDSON RESIGNS 287

PREVENTION OF RHEUMATIC FEVER 288

"THE FIRST BY WHOM THE NEW IS TRIED" 289

ORIGINAL ARTICLES—

SOME BENIGN CAUSES OF CECAL DEFORMITY—L. S. Ellenbogen, M.D., V. E. Johnson, M.D., M. Molitch, M.D. and L. Erber, M.D., Atlantic City, N. J. 290

PALATABLE LOW SODIUM DIET IN HYPERTENSION—George G. Ornstein, M.D. and Lawrence Lercher, M.D., New York, N. Y. 294

AURICULAR FLUTTER AND FLUTTER-FIBRILLATION ASSOCIATED WITH INTRAVENTRICULAR BLOCK TO RESEMBLE PAROXYSMAL VENTRICULAR TACHYCARDIA—Henry D. Chieffo, M.D. and Louis J. Gariba'di, M.D., Jersey City, N. J. 299

GLAUCOMATOUS OPTIC ATROPHY COMPLICATED BY SYPHILIS—Louis F. Raymond, M.D., East Orange, N. J. 304

EXPERIENCES WITH NEOHYDRIN, AN ORAL MERCURIAL DIURETIC—Dominic A. Mauriello, M.D. and Maurice Re, M.D., Jersey City, N. J. 305

ORIGINAL ARTICLES— Page

THE RELIEF OF ALLERGIC DISORDERS WITH A DOUBLE CALCIUM AND PHOSPHATE SALT—Gerald I. Kurtz, M.D., Paterson, N. J. 308

STATE ACTIVITIES—

Trustees' Meeting 311

Haddon Hall Highlights 313

1953 Annual Meeting Attendance 315

Skillman Neuro-Psychiatric Institute 315

LETTERS TO THE JOURNAL 316

ANNOUNCEMENTS 317

PUBLIC HEALTH NEWS 318

OBITUARIES 318

COUNTY SOCIETY REPORTS 319

WOMAN'S AUXILIARY 320

BOOK REVIEWS 321

TUBERCULOSIS ABSTRACTS 323

Roster of Officers, Advertising page 3A

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BRIEF OUTLINE OF COVERAGE

Accidental Bodily Injury Benefits —Full monthly benefit for total disability, from FIRST DAY, limit 60 months. One-half monthly benefit for partial disability, limit 6 months. Limit of time for total and partial combined 60 months.

Sickness Benefits —Full monthly benefit for total disability, commencing with EIGHTH DAY of disability, limit 24 months, house confinement not required.

Arbitration Clause —The Committee on Medical Defense and Insurance of The Medical Society of New Jersey are the SOLE arbiters in the event of any claim disagreement between Company and policyholder.

Cancellation Clause —Cancellation Clause, Standard Provision No. 16, not included in policy. The Company reserves the right to decline to renew on the following grounds only:

A. Non-payment of premium.
B. If the insured retires or ceases to be actively engaged in the medical profession.
C. If the insured ceases to be an active member of The Medical Society of New Jersey.
D. If renewal is refused on all policies issued to all members of the Society, in which event 60 days prior notice in writing must be given.

PREMIUM RATES

(Applicable to ages at entry and attained at annual renewal of insurance)
Ages shown below signify next birthday.

Monthly Benefits	Dismemberment Benefits	ANNUAL RATES* Ages up to 50	Ages 51 to 60	Ages 61 to 65**
$100.00	$ 5,000	$ 29.50	$ 34.00	$ 43.00
150.00	7,500	43.60	50.35	63.85
200.00	10,000	57.70	66.70	84.70
300.00	15,000	85.90	99.40	126.40
400.00	20,000	114.10	132.10	168.10
500.00	20,000	141.30	163.80	208.80
600.00	20,000	168.50	195.50	249.50

* Premiums may be paid half-yearly or quarterly, pro-rata.

* All rates above INCLUDE $1000 Accidental Death Benefit. Additional Accidental Death Benefit up to $4000 (making a total of $5000) may be procured for an additional annual premium of $1.30 per $1000.

Coverage for hospitalization and nursing fees is available at a small additional premium.

** Although the age limit for acceptance of risks is the 65th birthday, once issued there is no termination age limit for renewal and the rates of the last age group remain stationary.

This Company has been in business more than fifty-eight years and is one of the leading writers of Accident and Health Insurance, with a surplus to policy holders of more than seven million dollars.

If you are not insured under this plan or if you want further information, communicate with the undersigned managers.

Issued Exclusively by

NATIONAL CASUALTY COMPANY

Through

E. and W. BLANKSTEEN, Mgrs.

Authorized Disability Insurance Representatives of The Medical Society of New Jersey

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...gastrointestinal disturbances mild and relatively rare; no serious side effects reported.



USE ERYTHROCIN*

. . . fully potent; average adult daily dose 0.8 to 2.0 Gm., depending on type, severity of infection.



USE ERYTHROCIN*

...special absorption-favoring coating; 0.1 Gm. (100 mg.) tablets supplied in bottles of 25 and 100. Abbott

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1-178

Meat and its applicability in the Dietary Management of Atherosclerosis

Contrary to the former belief that serum cholesterol levels are primarily related to ingested animal fat and consequently to dietary cholesterol, it now appears that the total amount of fat in the diet, not its source or cholesterol content, is a more important factor in determining the blood cholesterol concentration.[1,2,3,4] Clinical observation has shown that ingestion of vegetable fat—which contains no cholesterol—will, like fats of animal origin, raise the serum cholesterol level.[3, 5]

Recent basic research on the influence of fats and cholesterol on human health has done much to further progress in the fight against atherosclerosis. It will serve well in dispelling the mistaken fear that reasonable amounts of foods of animal origin predispose the individual to this vascular disease.[6] As a matter of fact, a dietary inadequate in essential nutrients but providing too many calories and too much fat from *any* source may well be an important factor underlying the deposition of fat and cholesterol in the arteries and liver.

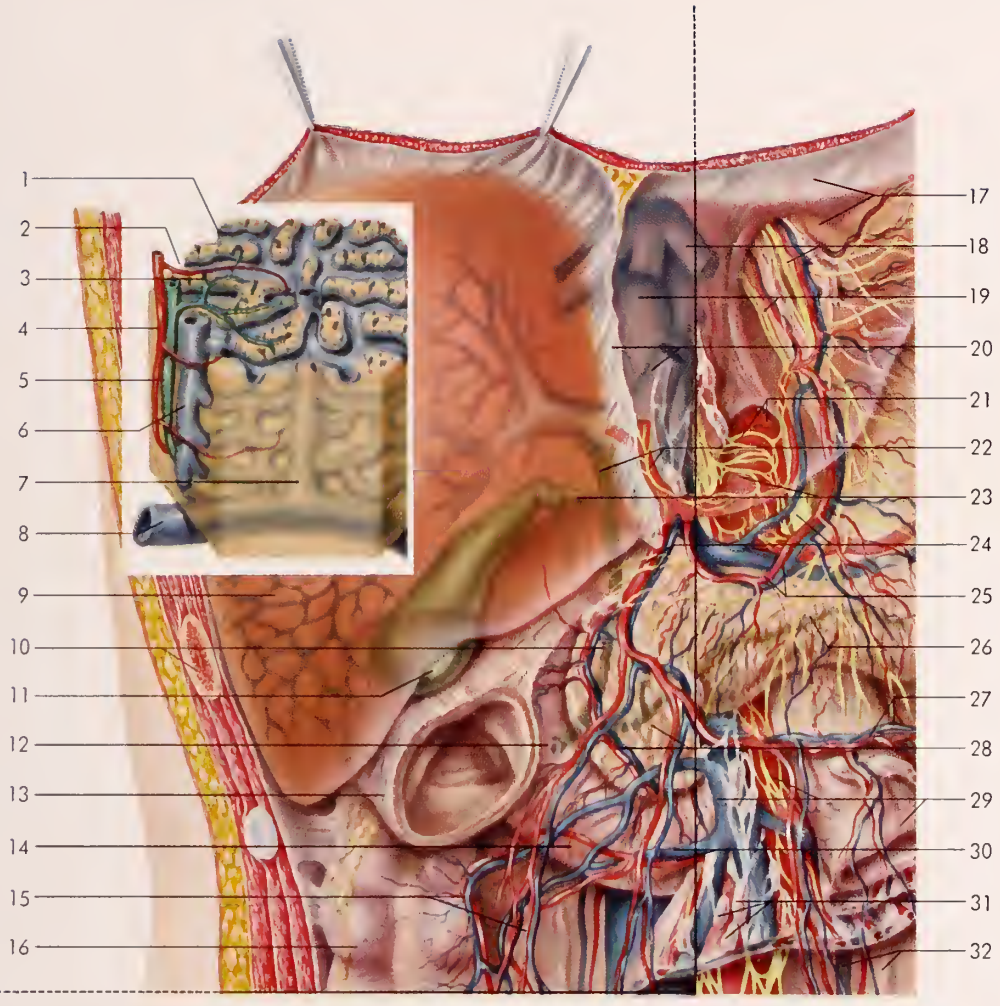
Cumulative evidence indicates that lowered blood levels of cholesterol may be effected by restricting the total fat intake.[1] Except in instances of refractory hypercholesteremia, in which a daily fat intake as low as 10 Gm. may not reduce cholesterol levels to normal, diets containing 20 to 30 Gm. of fat, or even more, often produce low cholesterol blood levels. In the clinical application of this principle, various palatable, low fat diets which supply three servings of meat daily (containing 18 Gm. of fat) have recently been suggested for the dietary management of arteriosclerosis and for enlisting the cooperation of patients.[1] The meat servings were chosen from a large variety of cuts and kinds of meat (fat trimmed off, as lean as possible). Meat adds to the eating appeal of the fat-restricted diet and contributes important amounts of biologically complete protein, the B group of vitamins including B_{12}, and food iron—all of which are important for a good state of nutrition in the atherosclerotic patient.

1. Hildreth, E.A.; Hildreth, D.M., and Mellinkoff, S.M.: Ptinciples of a Low Fat Diet, Circulation *4*:899 (Dec.) 1951.
2. Bloch, K.: The Intermediary Metabolism of Cholesterol, Circulation *1*:214 (Feb.) 1950.
3. Keys, A.; Mickelson, O.; Millet, E.V.O., and Chapman, L.B.: The Relation in Man Between Cholesterol Levels in the Diet and in the Blood, Science *112*:79, 1950.
4. Gubner, R., and Ungerleider, H.E.: Arteriosclerosis, a Statement of the Problem, Am. J. Med. *6*:60, 1949.
5. Hildreth, E.A.; Mellinkoff, S.M.; Blait, G.W., and Hildreth, D.M.: The Effect of Vegetable Fat Ingestion on Human Serum Cholesterol Concentration, Circulation *3*:641 (May) 1951.
6. King, C.G.: Trends in the Science of Food and Its Relation to Life and Health, Nutrition Rev. *10*:1 (Jan.) 1952.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

American Meat Institute
Main Office, Chicago... Members Throughout the United States

Upper Right Quadrant of the Abdomen



1 Sinusoid
2 Arteriole
3 Bile capillary
4 Branch of hepatic artery
5 Bile duct
6 Branch of portal vein
7 Central vein
8 Branch of inferior vena cava
9 Right lobe of liver
10 Common bile duct and tenth rib
11 Gallbladder
12 Papilla of Vater
13 Transverse colon
14 Duodenum
15 Branches of right colic artery and vein
16 Ascending colon
17 Coronary ligament and esophagus
18 Left hepatic vein and left vagus nerve
19 Inferior vena cava and right vagus nerve
20 Falciform ligament and branch of portal vein
21 Abdominal aorta and celiac plexus
22 Hepatic duct and hepatic artery
23 Cystic duct and celiac artery
24 Celiac ganglion and gastroduodenal artery and vein
25 Left gastric artery and coronary vein
26 Pancreatic duct
27 Right gastroepiploic artery and vein
28 Head of pancreas and pancreaticoduodenal artery and vein
29 Superior mesenteric artery and vein, and jejunum
30 Right colic artery and vein
31 Superior mesenteric lymph nodes
32 Inferior mesenteric vein and left ureter

This is one of a series of paintings for Lederle by Paul Peck, illustrating the anatomy of various organs and tissues of the body which are frequently attacked by infection, where aureomycin may prove useful.

Lederle

For prompt antibacterial action in biliary infections, prescribe...

Aureomycin

HYDROCHLORIDE CRYSTALLINE

This broad-spectrum antibiotic is rapidly distributed throughout the tissues and body fluids after oral administration, and is concentrated in the bile; thereby providing potent action for the control of liver and biliary infections, and for the prevention of infection following surgery of the biliary tract.

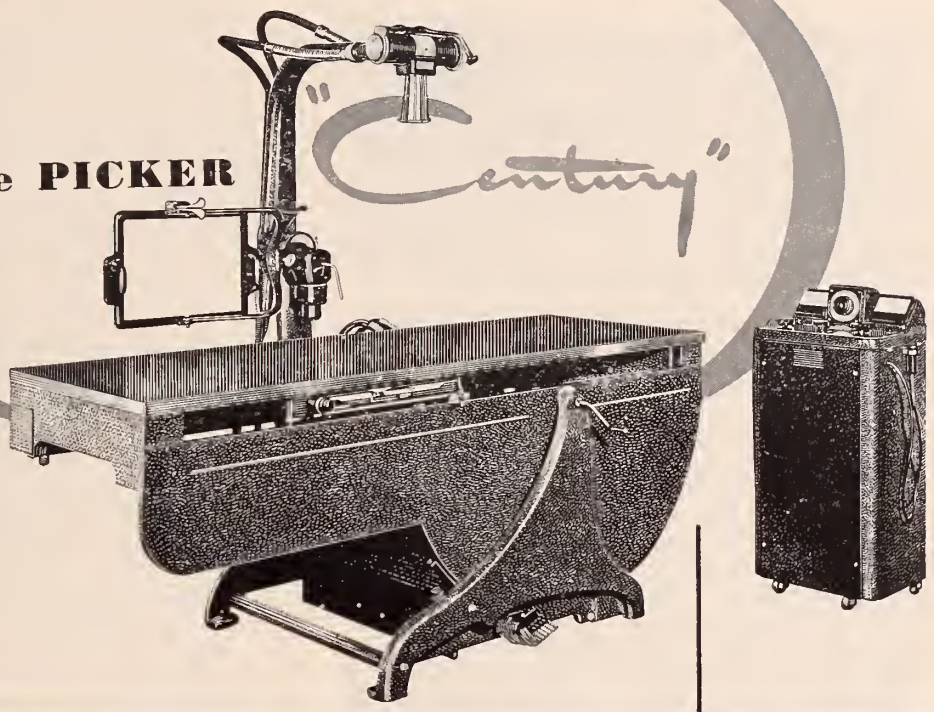
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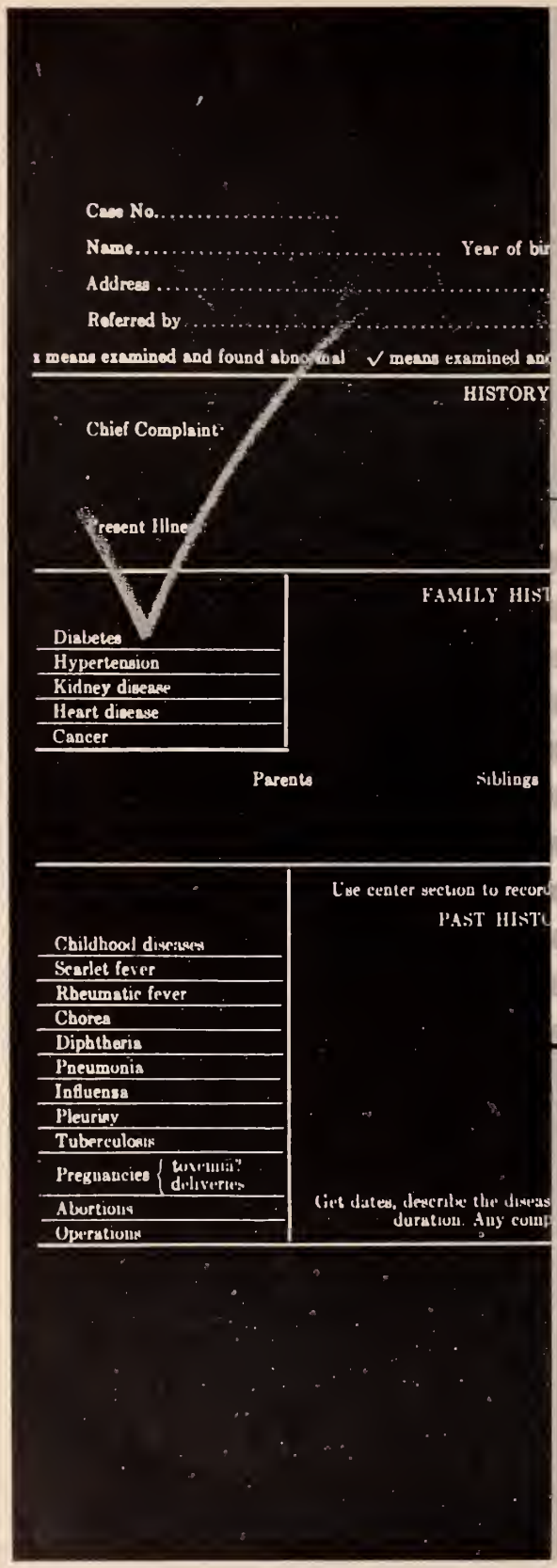
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Definitely the *fine* x-ray unit in the moderate price class ... and so widely esteemed that there are more Picker "Century" 100 ma units actively in use than any other similar apparatus.

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when the history hints at diabetes

CLINITEST®
BRAND

for urine-sugar analysis



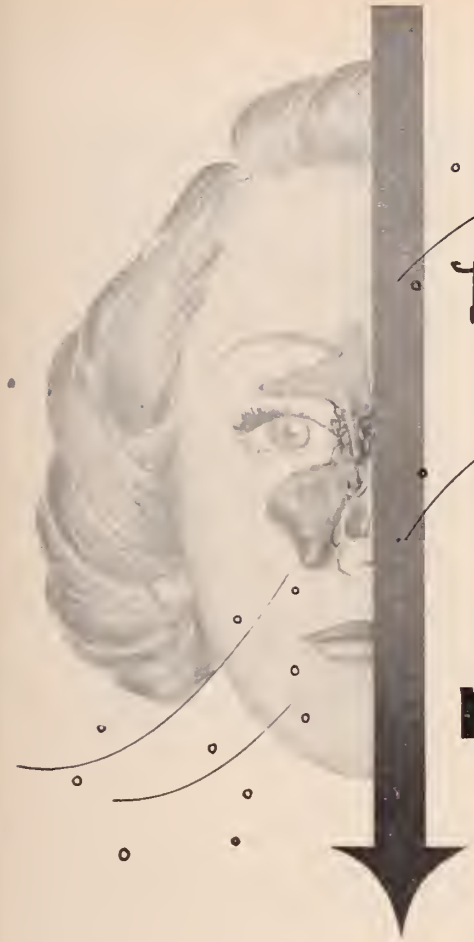
The Diabetic Relatives of 265 Diabetics[1]

In view of "...the very high incidence of...unsuspected cases among the blood relatives of diabetic patients."[2] urine-sugar testing of all such individuals should be routine and frequent.

1. Barach, J. H.: Diabetes and Its Treatment, New York, Oxford University Press, 1949, p. 38.
2. Allen, F. M.: Diabetes Mellitus, in Piersol, G. M., and Bortz, E. L.: Cyclopedia of Medicine, Surgery, Specialties, Philadelphia, F. A. Davis Company, 1951, vol. 4, p. 505.

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To open congested air passages in hay fever

NEO-SYNEPHRINE®

HYDROCHLORIDE

. . . reduces nasal engorgement

. . . promotes aeration . . . encourages drainage

A few drops of Neo-Synephrine 0.25% in each nostril will promptly check mucosal engorgement and hypersecretion, promoting greater breathing comfort over a period of several hours.

The resultant relief to the hay fever sufferer is decidedly gratifying. Prolonged action of Neo-Synephrine makes fewer applications necessary, consequently longer periods of rest and sleep are possible.

Neo-Synephrine does not lose its effectiveness on repeated application and may, therefore, be relied upon to give relief throughout the hay fever season.

Neo-Synephrine is practically free from sting and compensatory congestion; does not appreciably inhibit ciliary activity. Neo-Synephrine has been found relatively free from systemic side effects such as nervous excitation, cardiac reaction or insomnia even when tested on hypertensive, cardiac and hyperthyroid patients.[1]

Supplied in 0.25% solution (plain), bottles of 1 oz., 4 oz. and 16 oz.; 0.25% solution (aromatic), bottles of 1 oz. and 16 oz.; 0.5% solution, bottles of 1 oz.; 1% solution, bottles of 1 oz., 4 oz. and 16 oz.; 0.125 (1/8)% solution, bottles of 1/2 oz.; 0.5% water soluble jelly, in 5/8 oz. tubes.

1. Von Alyea, O. E., and Donnelly, Allen: *Arch. Otolaryng.*, 49:234, Feb., 1949.

Winthrop-Stearns INC.
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WHEN DIETARY SUPPLEMENTATION IS NEEDED...

what more could a supplement provide?

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How Ovaltine in milk approaches this concept, and how well the recommended three glassfuls daily augment the nutritional intake, is shown in the appended table. The two forms of Ovaltine available—plain and chocolate flavored—are closely alike in their nutrient values.

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Three Servings of Ovaltine in Milk Recommended for Daily Use Provide the Following Amounts of Nutrients

(Each serving made of ½ oz. of Ovaltine and 8 fl. oz. of whole milk)

MINERALS		VITAMINS	
*CALCIUM	1.12 Gm.	*ASCORBIC ACID	37 mg.
CHLORINE	900 mg.	BIOTIN	0.03 mg.
COBALT	0.006 mg.	CHOLINE	200 mg.
*COPPER	0.7 mg.	FOLIC ACID	0.05 mg.
FLUORINE	3.0 mg.	*NIACIN	6.7 mg.
*IODINE	0.15 mg.	PANTOTHENIC ACID	3.0 mg.
*IRON	12 mg.	PYRIDOXINE	0.6 mg.
MAGNESIUM	120 mg.	*RIBOFLAVIN	2.0 mg.
MANGANESE	0.4 mg.	*THIAMINE	1.2 mg.
*PHOSPHORUS	940 mg.	*VITAMIN A	3200 I.U.
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*PROTEIN (biologically complete)	32 Gm.
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*Nutrients for which daily dietary allowances are recommended by the National Research Council.



To reduce blood pressure and alleviate hypertensive symptoms

In discussing antihypertensive therapy, Grimson and co-workers conclude ". . . hexamethonium seems to be the best present medical approach toward blockade of the sympathetic nervous system."[1]

With Methium (hexamethonium chloride), *orally effective* ganglion blocking makes it possible to:

1. reduce blood pressure to normal or near-normal levels
2. produce marked subjective improvement. Even when blood pressure is not lowered significantly, headaches, dizziness, palpitation and other complaints disappear in the majority of cases.

Also, "Papilledema and retinal damage usually regress. Cerebral edema and vomiting can be relieved. Pulmonary edema may be lessened or resolved and cardiac hypertrophy diminished."[2]

Methium is particularly indicated in severe hypertension. In malignant hypertension it is known to stay the rapid progress of the disease. Induction of lower blood pressure and increase of dosage should be gradual. Once maximal therapeutic benefit is obtained, dosage can be stabilized and therapy maintained indefinitely.

Methium is a potent drug and should be used with particular caution when complications exist —impaired renal function, coronary artery disease and existing or threatened cerebral vascular accidents. Complete instructions for the use of Methium are available and should be consulted prior to instituting Methium therapy.

Methium is supplied in both 125 mg. and 250 mg. scored tablets in bottles of 100 and 500.

1. Grimson, K. S.; Orgain, E. S.; Rowe, C. R., and Sieber, H. A.: J.A.M.A. *149*:215 (May 17) 1952.
2. Paton, W. D. M., and Zaimis, E. J.: Pharm. Reviews *4*:219 (Sept.) 1952.

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Gantrisin is a sulfonamide so soluble that there is little danger of renal blocking and little or no need for alkalinization.

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Gantrisin not only produces a high blood level but also provides a wide antibacterial spectrum.

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Gantrisin is a relatively economical antibacterial agent.

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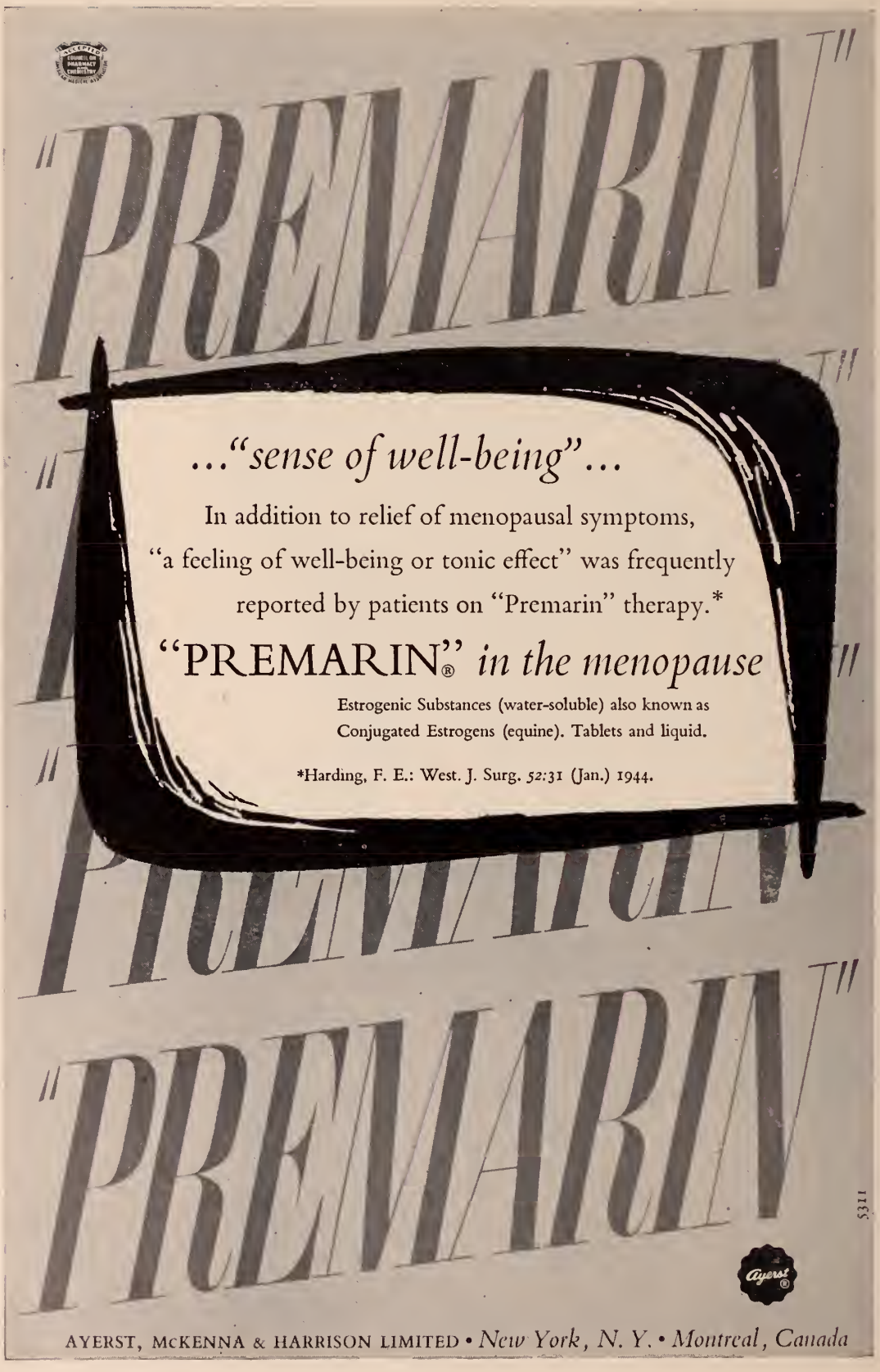
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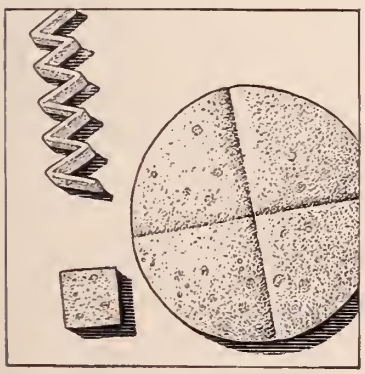
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2 alternatives for the hay fever patient

2 *to relieve symptoms*



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(tripelennamine hydrochloride Ciba)

Once atop Pike's Peak, your hay fever patient can enjoy freedom from pollens. But for patients who must remain in a high-pollen environment, you can institute this effective therapy: one or two Pyribenzamine tablets, 3 or 4 times daily.

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Ciba *Ciba Pharmaceutical Products, Inc., Summit, N. J.*

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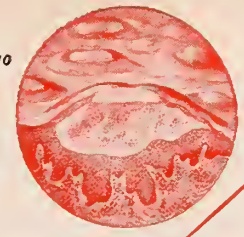
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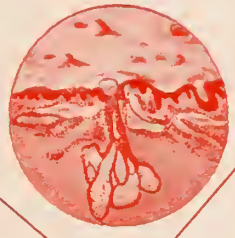
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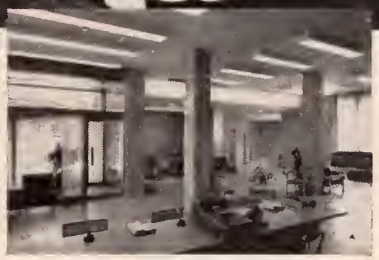
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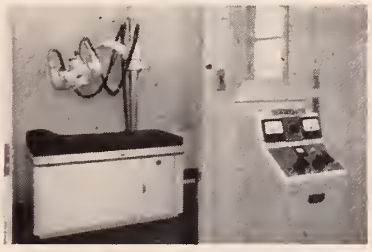




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HENRY A. DAVIDSON RESIGNS

Readers of THE JOURNAL are well acquainted with Dr. Henry Davidson, editor of our JOURNAL from 1941 to 1952, and thereafter editorial consultant until May, 1953. The present high standing of this publication among state medical journals is a tribute to the editorial ability of Dr. Davidson. Our society sincerely regrets that geographic limitations make it impossible for him to serve with us any longer. During his tenure as editor, Dr. Davidson established and maintained high ideals for THE JOURNAL, and the results of his efforts will long serve as a model for the future.

Dr. Davidson was particularly skilled in handling the unpublished problems of an editor's post. His relations with authors, advertisers, other editors, officers of the society, and the office staff were admirable. He worked in close liaison with the Publication Committee and the Board of Trustees, to the lasting benefit of this society.

Those who know Dr. Davidson well know him to be a generous, kind man, with a keen sense of wit, an ever-ready fund of information, and an amazing faculty for expressing himself through the printed word.

Unfortunately for New Jersey, the Veterans Administration also recognized his remarkable ability, and he was called to serve in Washington as Chief of the Program and Planning Section of the Psychiatry Division at the Central Office of the VA. In his typical, conscientious way, Dr. Davidson realized that he could not do justice to his New Jersey postion, and so took necessary steps to arrange the smooth transition of his editorial responsibilities to his successor. This transfer now accomplished, he terminates with it his formal contact with our medical society.

However, the loyalty of Dr. Davidson is such that he will always havs a strong allegiance to this state and its medical society. If future editorials and articles seem now and then to bear the stamp of a familiar personality, there will be no magic in their appearance — only the return of an old friend.

PREVENTION OF RHEUMATIC FEVER

Since rheumatic fever occurs in at least three per cent of untreated streptococcal infections, and since it is generally agreed that both the initial and recurrent attacks are precipitated by infections with *beta hemolytic streptococci,* preventive measures are best directed against infection with this organism. It is felt that early and adequate treatment of streptococcal infections in all individuals will aid in the prevention of rheumatic fever, and the control of streptococcal infections in rheumatic patients will minimize recurrences. The Committee on Prevention of Rheumatic Fever of the American Heart Association has outlined preventive measures in a recent issue of Modern Concepts.*

The first step is to establish the diagnosis of streptococcal infection. Typical symptoms are sore throat, headache, fever ranging from 101 to 104 degrees Fahrenheit, abdominal pain or nausea and vomiting in children. Simple coryza, cough and hoarseness are usually not found. Physical examination may show a beefy red throat, swollen, tonsillar glands at the angle of the jaw, exudate, or purulent discharge in cases of otitis media or sinusitis. An elevated white count (12,000 in adults, up to 20,000 and above in children) and positive throat culture confirm the diagnosis, as does the fact that there is a prompt response to penicillin within 24 hours in almost every case.

The treatment of choice for streptococcal infections is penicillin, either orally or by injection. Intramuscular doses recommended are: for children, 300,000 units of procaine penicillin with aluminum monostearate in oil every third day for three doses; for adults, 600,000 units of the same preparation, also every third day for three doses.

Oral penicillin should be given in doses of 200,000 to 300,000 units four times a day for the first five days, and 200,000 to 250,000 units four times a day for the next five days. The antibiotic is best administered one-half to one hour before meals and at bedtime, and it is emphasized that a full ten days of treatment are required even though the symptoms and fever subside after one or two days.

Combined intramuscular and oral penicillin may also be given, starting with one injection of 300,000 units followed on the third day with oral penicillin in the same doses outlined above for the next seven days.

The value of other antibiotics has not yet been fully determined at the present time. Sulfonamides are not recommended by this committee.

For the prevention of streptococcal infections in patients with rheumatic fever or rheumatic heart disease, sulfadiazine, 0.5 to 1.0 gram daily throughout the year is advised. If there are toxic manifestations such as skin eruptions or leukopenia, oral penicillin in doses of 200,000 to 250,000 units twice daily is recommended. There also may be toxic reactions to penicillin, as urticaria, serum sickness-like reactions with fever and joint pains that may resemble rheumatic fever, or angioneurotic edema.

Conscientious application of the principles and therapy outlined above should result in definite reduction in the high incidence of rheumatic fever and recurrences of rheumatic heart disease.

*Breese, B. B., *et al.*: Prevention of Rheumatic Fever. Modern Concepts of Cardiovascular Disease 22:158, January 1953.

"THE FIRST BY WHOM THE NEW IS TRIED"

"Be not the first by whom the new is tried" is one of the admonitions frequently given to practitioners in any of the social or natural sciences. The wisdom of this advice is obvious, particularly as applied to the practice of medicine. The difficulty is, however, that unless some one is the first to try a new procedure, there will never be any progress.

In these days of rapid fire public education in medicine, this poses a common problem. A patient reads, in the newspaper, of a new method of treating his hay fever, and thrusts the paper at his doctor with a demand that he be given the benefit of the latest "discovery". The doctor cannot say that the method is unsound—that hasn't been proved yet. He cannot say that the method is effective —that hasn't been proved either. He could, of course, say, with hurt dignity, that he doesn't learn medicine from the public press, and explain that he will install treatment methods as soon as they are described in, and verified in scientific periodicals. But the patient really isn't interested in the doctor's journalistic ethics.

It is a temptation for the practitioner to yield to the patient's demand and be the first in town to try the new procedure. Unfortunately, the history of medicine is a highway lined with the corpses of once-touted, now-discarded therapeutic technics. Almost always a new procedure goes through five stages. First is joyful discovery. Then enthusiastic confirmation and acceptance. Third come reports of untoward results. Next comes a stage of disillusion. And finally the procedure settles down to some niche in the therapeutic armory — usually smaller than had been first anticipated.

As an example, consider the proposed injection of fish lens protein for the treatment of cataract. This was not only widely heralded in the public press, but received the dignity of publication [1] in *Science*, the reputable periodical of the American Association for the Advancement of Science. Our JOURNAL then published an abstract of the article,[2] in consonance with the Publication Committee's policy of bringing to the attention of our readers any new and promising procedure published in a reputable scientific periodical. The abstract spoke for itself, and indicated that the work was experimental and that it would be a boon to humanity if—and only if—it was subsequently verified by independent observers. It is assumed that no reader of this JOURNAL would be so naive as to rush into a procedure recommended so tentatively. Now the reports of the untoward effects are beginning to come in. Posner [3] has admirably summarized the danger of rendering a patient sensitive to his own lens protein as a result of this procedure.

A similar march of events can be recalled for many other dramatically introduced medical methods. There seems to be no short cut here. Scientific validation is a prerequisite to the use of any new therapy, and the scrupulous practitioner does not let himself be stampeded into premature use of a novel procedure, even at the risk of being stigmatized as an old fogey. Experimentation may be the keystone of medical progress. But the patient cannot be used as the subject to such experimentation unless he has been made fully aware of the dangers. Anything less than that is irresponsible medicine.

H. A. D.

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ORIGINAL ARTICLES

SOME BENIGN CAUSES OF CECAL DEFORMITY

L. S. ELLENBOGEN, M.D.; V. E. JOHNSON, M.D.;
M. MOLITCH, M.D. and L. ERBER, M.D., Atlantic City, N. J.

Three less commonly seen causes of filling defects in the cecum are presented. The importance of their roentgenologic detection and their benign nature is stressed.

A great deal of investigative work has made it possible for the roentgenologist to identify certain filling defects of the cecum due to non-malignant conditions such as tuberculosis [1,2] and amebiasis.[3,4] Other conditions such as granulomas secondary to appendicitis are not readily distinguishable from neoplasms.[5] It is our purpose to present, with illustrative case reports, three less well-known but readily recognizable, benign causes of cecal deformity. They are hypertrophy of the ileocecal valve, spasm of the ceco-colic sphincter and regional ileocolitis.

HYPERTROPHY OF THE ILEOCECAL VALVE

Occasionally the ileocecal valve may be thickened or edematous enough to produce a smooth, symmetrical filling defect centering about the terminal ileum.[6] This defect is sharply marginated, is not associated with a palpable mass and exhibits no evidence of mucosal fold destruction. Pressure films and air contrast studies show folds radiating from a central star. Barium meal examination clearly shows the relation of this filling defect to the terminal ileum. Although the filling defects caused by hypertrophy of the ileocecal valve are quite large—from 2 to 4 cm. in diameter,[7] they usually can be distinguished readily from tumors by the characteristics noted. An inverted appendiceal stump may produce a somewhat similar negative shadow in the barium-filled cecum but here observing the relation of the defect to the terminal ileum enables differentiation. The following case report and illustrations present an example of this condition.

Case 1—Mrs. E. S., a 55-year old white female, complained of left abdominal pain of several months' duration. The pain developed about two hours after the evening meal. The remainder of the history and the physical and laboratory examinations were negative.

Roentgen examination of the colon by barium enema and air contrast studies (by L.S.E.) demonstrated a smooth, well-demarcated filling defect of the cecum in the area of the ileocecal valve. The defect measured 4.2 x 2 cm. on the film made at 36 inches target-film distance. A central density from which folds radiated outward in a stellate manner was readily seen without compression. (Fig. 1 a & b). No reflux of barium into the terminal ileum could be obtained. Air contrast films showed a doughtnut shaped, intraluminal mass with broad, smooth walls. (Fig. 2b.) A diagnosis of hypertrophied ileocecal valve was made. The diagnosis was confirmed by subsequent barium meal examination. This demonstrated the central area of the cecal defect to be in continuity with the lumen of the terminal ileum (Fig. 2a). The raised walls of the defect were symmetrically disposed about the entrance of the terminal ileum.

Because of the roentgen diagnosis, no operative exploration was undertaken. The patient was given a bland diet following which symptoms disappeared. She has been entirely well with no other treatment, for the past two years.

SPASM OF THE CECO-COLIC SPHINCTER

The ceco-colic sphincter between cecum and ascending colon was first described by the anatomist, Keith, in 1903. Hirsch first demonstrated it by the roentgen method in humans in 1924.[7] The function of this sphincter is the regulation of the escape of cecal contents. Its abnormal function may cause ileocecal stasis.[8] The following is a clinical example.

Case 2—A 46-year old white female complained of mid-abdominal pain of several months' duration and of nervousness. Physical examination dis-



Figure 1. (a) Arrow points to smooth, filling defect of cecum in region of the ileocecal valve. (b) Compression film disclosing mucosal pattern about the defect.

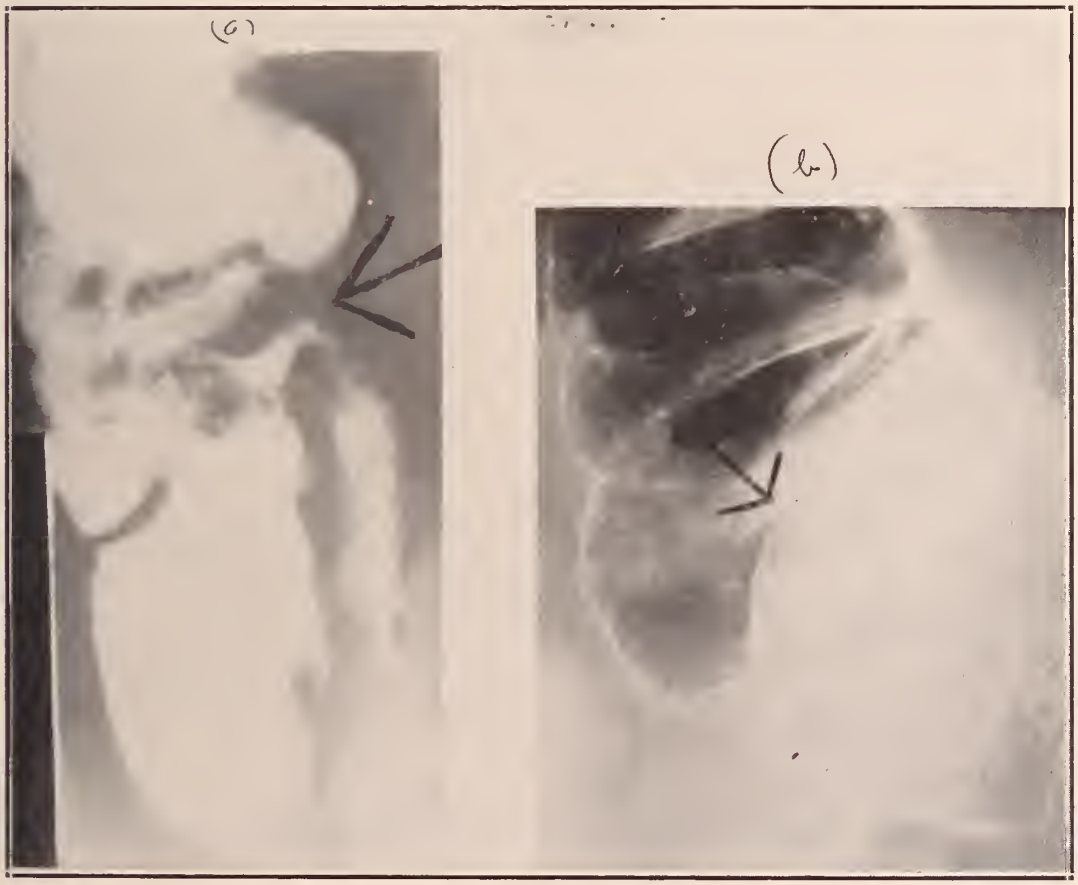


Figure 2. (a) Barium meal study. The arrow points to the terminal ileum. The central area of the cecal defect is in continuity with the walls of the terminal ileum. (b) Air contrast film shows a smooth doughnut shaped intraluminal mass.

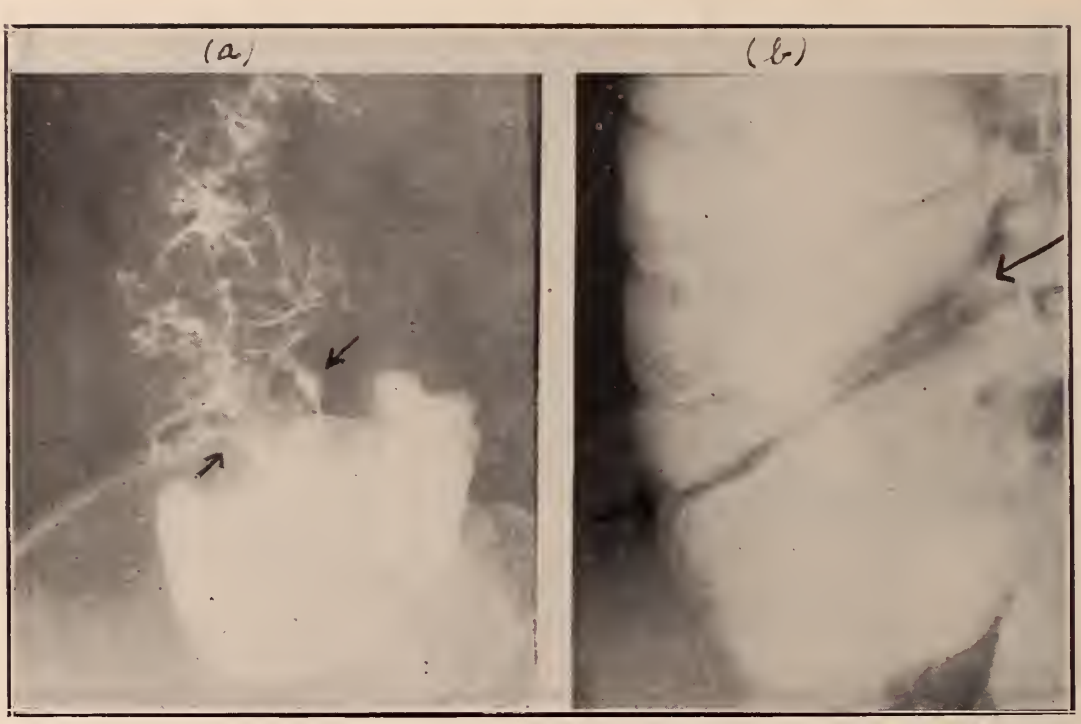


Figure 3. (a) Post-evacuation film shows cecal retention proximal to ceco-colic sphincter (arrows). (b) Appearance of ceco-colic sphincter with colon distended.

closed moderately severe hypertension and a boggy, somewhat tender, right lower quadrant mass. A barium enema examination of the colon (by L.S.E.) demonstrated a smooth narrowing at the junction of the cecum and ascending colon. Normal mucosal folds were shown in the narrowed area which were attributed to spasm of the ceco-colic sphincter. (Fig. 3b). After evacuation, a good deal of barium was retained in the cecum. (Fig. 3a) A diagnosis of cecal stasis secondary to spasm of the ceco-colic sphincter was made and repeat studies advised after appropriate therapy.

The patient was placed on a low-residue diet and given an antispasmodic. A laxative which she had been taking daily was discontinued. Her symptoms cleared promptly. On re-examination a month later she was symptom-free. Studies by both barium meal and barium enema showed no cecal stasis and no unusual prominence of the ceco-colic sphincter. When last seen, two years later, she was entirely well.

REGIONAL ENTERITIS

With increasing knowledge, we have learned that the disease originally termed "regional ileitis" may involve not only "skip areas" in the small intestine but also the colon. The cecum is frequently involved by this disease.[10] Such involvement may be due to spasm, extrinsic pressure or to actual organic inflammatory disease of the cecum.[11] It is important to keep this possibility in mind as classically tuberculosis is thought of first in disease involving both terminal ileum and cecum. However intestinal tuberculosis is rare outside of sanatoria. The differential diagnosis is usually readily made by the absence of tuberculosis elsewhere, by the history, and by laboratory studies.

Case 3—A 35-year old white male developed recurrent attacks of right lower quadrant pain accompanied by diarrhea and vomiting while in the army. He lost a great deal of weight. A diagnosis of regional ileitis was made. He improved after leaving the service in that attacks became less frequent and he regained weight. The attacks were characterized by constipation followed by diarrhea. Examinations during the attacks of pain showed abdominal distension and right lower quadrant fullness and tenderness. There have been tarry stools during some of these attacks. A series of x-ray treatments were given to the abdomen (by L. S. E.) after the method of Popp [12] and these resulted in moderate improvement. Several roentgen examinations have shown a stationary process characterized by irregular narrowing of a long segment of terminal ileum and cecum with a loss of normal mucosal pattern in the affected area. The ileum proximal to the narrowed terminal portion is dilated. (Fig. 4). There are

short areas of narrowing in the proximal ileum considered to be skip areas. These are not shown in the illustration.

CONCLUSION

The roentgen appearance of the cecum is often altered by disease processes of a benign nature and also by normal variations. These include tuberculosis, amebiasis and regional enteritis as well as hypertrophy of the ileocecal valve and spasm of the ceco-colic sphincter. The three last-named conditions are discussed with illustrative case reports and roentgenograms. The roentgen recognition of hypertrophy of the ileocecal sphincter and of spasm of the ceco-colic sphincter may save a patient from unnecessary surgery. It is important to recognize regional enteritis with involvement of the terminal ileum and cecum in order to differentiate this condition from the much rarer tuberculous involvement of cecum and ileum. In any case of cecal deformity where the diagnosis of neoplasm cannot be excluded definitely, surgical exploration is advised.



Figure 4. The arrow points to the involved cecum. The double arrows indicate dilated ileum proximal to the long, narrowed terminal portion of the ileum.

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SPLENIC FLEXURE SYNDROME

Many clinical states superficially resemble angina pectoris or coronary insufficiency, and need to be considered in the differential diagnosis of these conditions. Machella[1] and his co-workers have recently described the splenic flexure syndrome as a possible cause for precordial pain. This syndrome consists of pain or discomfort in the precordial area, chest, left shoulder, neck, or arm, and may be accompanied by dyspnea, palpitation and apprehension. In most cases the symptoms were precipitated by emotional disturbances and associated with constipation. They were relieved by the expulsion of flatus or feces, and this particular point is the distinguishing feature of this syndrome. X-rays of the abdomen during symptoms showed gaseous distention of the splenic flexure, and symptoms could be reproduced by air inflation of a balloon introduced into the same colon segment via the rectum. The most important aspect of this syndrome is its recognition and consideration in the differential diagnosis of coronary artery disease.

1. Machella, T. C., *et al.*: Observations on the Splenic Flexure Syndrome. Ann. Int. Med. 37:543 (September, 1952).

PALATABLE LOW SODIUM DIET IN HYPERTENSION

George G. Ornstein, M.D., and Lawrence Lercher, M.D.,
New York, N. Y.

A simplified method of preparing a palatable low sodium diet is described. Its beneficial effects in 39 of 42 hypertensive patients is summarized.

There has been a considerable accumulation of reports that a depletion of sodium in the diet is of benefit in essential hypertension.[1-13] That the sodium intake has not been sufficiently reduced in the past is significant, though the importance of doing this was demonstrated in 1922 by Allen and Sherril.[3] The latter concluded that essential hypertensive patients did better if the sodium radical was restricted to about 200 milligrams per day. This standard is now well accepted. Bryant, Iob, Philips and Blecha[14] have devised a simple urinary test which informs patients whether in the preceding twenty-four hours they have partaken of more than 200 milligrams of sodium. This test, though not scientifically accurate, is a good clinical test to guide the patient, as a Clinitest® tablet test guides the diabetic.

Kempner[7] in 1946 reported a rice, fruit and sugar diet that contained about 150 milligrams of sodium. The patients were kept on a rigid diet for three months or more and if they improved were given other foods in addition to the rice, fruit and sugar. At first the sodium was close to 50 milligrams and then went up to 150 milligrams.

Ornstein[13] in 1950 used only 50 milligrams in his diets and was able to reach so low a figure by removing the sodium from non-permissible foods by boiling the foods in water containing a small amount of sodium or in distilled water. The food was boiled three or more times and tested with the Bryant[14] method that patients were educated to use before they ate. Patients having a method to prepare any food they wished to eat were not as depressed as when their diet was limited to Kempner's diet. This diet achieved two things: 1.) The patients were able to consume the required amount of protein that is essential for humans;[16] 2.) The diet was variable and palatable. Because of these factors the patients were able to stay on this diet for long periods of time.

METHODS

This method of sodium depletion though simple, was tedious. It required a cook or the patient to be at the stove continually. Since April 1950 the Ornstein method of sodium depletion has been changed and requires little effort. Instead of boiling the sodium out of non-permissible foods the latter are immersed in water for sufficient periods of time and the sodium is apparently dialysed out. The water is changed three times over a period of approximately eight hours. Patients using this method have a better Bryant[14] urine test showing the method is good, and there is sufficient depletion of sodium to make the foods permissible. It must be pointed out that the foods must be fresh. Smoked and salted foods are forbidden. Now the patient may eat all fresh vegetables for the previously non-permissible ones like celery, carrots, spinach, beets and lettuce can be soaked until they are permissible.

This method of desodiumizing foods opens a new horizon for the salt-free patient. First, he may use raw meats in the preparation of cooked foods. There is little loss of taste. Now a steak, chop or hamburger may be turned into desodiumized meat. Fish may be desodiumized in a similar manner. Fresh salt or fresh water fish may be used but one must be sure the fillets are not salted though fresh. In sea foods, the shells are removed and the meat is soaked. After the proper time for desodiumizing has elapsed, shell food may be cooked, broiled or fried. Thus shrimp, scallops, oyster and lobster tails may be used.

Eggs are first boiled hard, shelled and then soaked for eight hours and the water changed three times; they lose little in their taste and can be used in salads with fresh vegetables or they may be heated in water, cut in half, arranged on a slice of toast made of 4 milligram bread and a white sauce made of Lonalac® added. The following is an outline of a day's menu. Ornstein[15] has written a booklet on low sodium diet recipes showing the amount of sodium in the recipes so that the physician can easily direct the patient in the preparation of a low sodium diet.

The following three meals contain 61.35 milligrams of sodium, 71.42 grams of protein and 2318 calories. The day's menu is much below 100 milligrams of sodium; it has more than the necessary protein and adheres to an individual's requirement of at least 40 grams of protein a day for nitrogen equilibrium.[16]

We have presented a simple method for easily maintaining a low sodium diet below 100 milligrams with a variable change of fresh foods that are palatable. Patients have been willing to continue on such a diet for long periods without the desire to abandon it.

BREAKFAST

Quantity	Item	Na Mg.	C Gms.	P Gms.	F Gms.	Cal
½ - 4" diameter	Grapefruit	0.50	9.00	0.50	0.20	45.00
¼ cup	Oatmeal, dry	0.40	13.50	1.40	3.20	90.00
2 tablespoons	Lonalac® milk liquified	0.35	1.50	1.06	1.09	20.00
1 teaspoon	Sugar, white granulated	0.01	5.47	——	——	22.00
2 slices	Bread, 4 mg. sodium loaf	0.40	19.56	3.00	2.60	115.00
1 teaspoon	Butter, sweet	0.75	——	——	12.00	112.00
1 tablespoon	Coffee bean, roasted	0.32	——	——	——	——
2 tablespoons	Lonalac® milk liquified	0.35	1.50	1.06	1.09	20.00
1 teaspoon	Sugar, white granulated	0.01	5.47	——	——	22.00
	Total	3.10	56.00	7.05	20.18	446.00

This is a sufficient breakfast and only contains 3.10 milligrams of sodium, 7.02 grams of protein and 446 calories.

LUNCH

Quantity	Item	Na Mg.	C Gms.	P Gms.	F Gms.	Cal
1 Portion	Mushroom and tomato on toast	6.45	15.38	5.30	18.40	254.00
2 slices	Bread, 4 mg. sodium loaf	0.40	19.56	3.00	2.60	115.00
1 teaspoon	Butter, sweet	0.75	——	——	12.00	112.00
1 portion	Baked peach	2.05	42.87	4.00	17.80	251.00
1 cup	Tea	0.10	——	——	——	——
2 tablespoons	Lonalac® milk liquified	0.35	1.50	1.06	1.09	20.00
1 teaspoon	Sugar, white granulated	0.01	5.47	——	——	22.00
	Total	10.11	84.78	13.36	51.89	774.00

This lunch is pleasant and only contains 10.11 milligrams of sodium. It also has 13.36 grams of protein and 774 calories.

The lunch may be varied by substituting a fresh green salad. The non-permissible vegetables like celery, carrots and lettuce may be first immersed in water for eight hours in a large dish in the ice box and the water changed three times. The vegetables are crisp and free of sodium. Tomato which has little sodium may be added to the salad. Wesson Oil and vinegar may be added for taste.

Any three cooked vegetables may be substituted. Remember you may only use fresh permissible vegetables.

DINNER

Quantity	Item	Na Mg.	C Gms.	P Gms.	F Gms.	Cal
2 lean, single	Broiled chops	27.60	——	31.70	8.50	210.00
Potato (medium)	Baked	8.00	18.00	3.00	——	85.00
Peas, fresh shelled (⅔ cup)	Boiled	0.90	12.00	5.40	0.30	69.00
2 slices	Bread, 4 mg. sodium loaf	0.40	19.56	3.00	2.60	115.00
1 teaspoon	Butter, sweet	0.75	——	——	12.00	112.00
1 small sliced	Tomato	3.00	3.00	2.00	——	20.00
10 slices, thin	Cucumber	0.60	2.30	0.60	——	15.00
1 small leaf	Lettuce (desodiumized)	3.50	0.75	0.30	0.10	5.00
1 tablespoon	Wesson oil	0.03	——	——	15.00	135.00
1 tablespoon	Vinegar, white distilled	0.90	——	——	——	——
1 cup sliced	Mixed fresh fruit	2.00	70.00	4.00	2.00	290.00
1 cup	Tea	0.10	——	——	——	——
2 tablespoons	Lonalac® milk liquified	0.35	1.50	1.06	1.09	20.00
1 teaspoon	Sugar, white granulated	0.01	5.47	——	——	22.00
	Total	48.14	132.58	51.06	41.59	1098.00

This is a satisfactory and compatible dinner and only has 48.14 milligrams of sodium, 51.06 grams of protein and 1098 calories. The simple method of soaking the fresh meat or fish in water reduced the original sodium content down so that "non-permissible" foods now can be used by low sodium dietary patients. For example this method will reduce 100 grams of porterhouse steak from 81 milligrams of sodium to 31 milligrams, a chicken leg of a broiler from 92 milligrams to 53 milligrams, a lamb chop from 81 milligrams to 23 milligrams, and cod fish from 71 milligrams to 41 milligrams. Sodium was calculated with a photometer. On the average, sodium content was reduced fifty per cent. Now almost any meat or fish may be utilized in the diet if the foods are sufficiently soaked and the water changed frequently.

This is the opposite to what Watkin, *et al*,[17] stated in 1950, "That the protracted effective maintenance of the Kempner regimen in its present form imposes such hardships upon the patient and so much difficulty in control as to make it virtually impracticable for general use".

The clinical results appeared good. The patients had to be ambulatory for there was no institution to which they could be sent since no hospital has low sodium diets that were not above 200 milligrams of sodium. Most low sodium diets in hospitals contain from 500 to 1500 milligrams. The patients prepared their foods at home. They visited the office once a week until they knew how to arrange a diet below 100 milligrams of sodium.

Patients were able to do their routine chores. They were not fatigued and were rarely hungry since they were allowed as much fresh fruit as they desired in addition to the regular prescribed diet. They were limited to a maximum of one liter of fluid. Kempner uses 700 to 1000 c.c. of fluid. Page and Corcoran[18] recommend 1500 to 2000 c.c. The latter authors state there is a danger of sodium retention if 3000 or more cubic centimeters are taken a day. We have noted that patients on a strict low sodium diet do not require more than 1000 c.c. of fluid; if they use more they are probably not adhering to the diet or are drinking from habit. In any event, two liters should not be exceeded. Nocturia, if it was present, is usually eliminated or diminished.

Symptoms usually disappear promptly. The fatigue commonly encountered with the rice diet is not noted. The patients invariably lose weight and then stabilize. In patients previously on a salt-poor diet (500 mg.) the loss may be slight.

The cardiac silhouette was usually reduced in size. This reduction often occurred within two weeks, but more frequently after a month. The electrocardiogram corroborated the change in the size of the heart and retinoscopy showed a reversal of the changes commonly associated with hypertension.

The recording of the blood pressure was difficult. Our method is that we record it after the patient reaches our office. After the patient has had at least 15 minutes of rest

in the sitting position, three pressure readings are made on the right arm. Then the cuff is placed on the left arm and a similar number of readings made. It has been noticed that the first six readings showed very little change. In the following six weeks the first two or three readings are higher than the last two or three. They are usually lower than the previous week but there is a wide variation between the first high reading and the low of the morning. As time goes on this variation is very great.

In comparision with our method of establishing the average blood pressure, Watkin, *et al.*[17] took the lowest blood pressure they obtained in the morning before the patient had arisen from bed. They took such measurements three mornings of the week and made a mean of these readings.

RESULTS

A total of 42 hypertensive patients have been treated with this method of restricting the dietary sodium intake. Their ages ranged from 40 to 70, and 26 were males, 18 females. As a result of this form of dietary management there was a significant reduction of the blood pressure and a satisfactory loss of weight, so that patients who were obese more nearly approached the norm for height and weight. There was also marked improvement in the symptoms of hypertension with reduction in headache, vertigo, blurring of vision, and nocturia. In addition many patients exhibited a reduction in the size of the heart as determined by roentgenograms and fluoroscopic examinations. In some patients symptomatic improvement was so striking that they were able to return to work and carry out a full day of normal occupational activity.

CASE REPORT

R. G. This 68-year old white male was first seen on December 8, 1950 with a blood pressure of 197/110. He had known hypertension for 11 years and a left hemiplegia resulting from a previous cerebral hemorrhage. His initial weight was 179. There were no other significant findings.

On September 17, 1951, after nine months of this regimen, his blood pressure had fallen to 148/69. There was no further evidence of paralysis and the weight was now 168 lbs.

In this series there were three deaths. R. J., a 55-year old white male, died of uremia two months after the start of treatment. There was no improvement in his blood pressure, which was undoubtedly on a renal basis. H. I. a 64-year old white male, whose blood pressure showed a significant drop after treatment, died of an acute myocardial infarction two months after start of therapy. T. E., a 55-year old white female, whose blood pressure also showed improvement after treatment, died of a cerebral hemorrhage six weeks after she was first seen.

DISCUSSION

A low sodium diet has been constructed using foods rich in sodium rendered sodium poor by soaking in water. The daily sodium intake can thereby be held to 100 milligrams or less. The diet is palatable and variable.

In the removal of sodium by the soaking method there is a loss of any water soluble vitamin which the foods may have contained. Some of the meats, fish, eggs and vegetables contain vitamin A that is soluble only in oils. The water soluble ones, chiefly thiamin, riboflavin, ascorbic acid and niacin are all lost in such long immersion in water, and those vitamins should be replaced with capsules containing at least the following: vitamin A, 10,000 U.S.P. units; vitamin D, 1000 U.S.P. units; thiamin hydrochloride, 3 mg.; riboflavin, 4 mg.; nicotinamide, 25 mg.; and ascorbic acid, 100 mg.

One must keep in mind that there are only five vegetables that need to be soaked in water; lettuce, celery, carrots, beets and spinach. The rest of the vegetable family and all fruits are normally permissible, and all the water soluble vitamins that the body needs are contained in these vegetables. Although these vitamins are lost by the soaking method, the authors believe that they can be supplemented by vitamin capsules containing no sodium. A number of pharmaceutical houses make such capsules.

A loss of potassium by soaking food may be disregarded inasmuch as potassium is contained in the natural vegetables and fruits allowed. Similarly, other minerals and carbohydrates are supplied by the natural foods that are permitted.

In the treatment of cardiac failure in hypertension there can be no doubt as to the value of low sodium diets. There has been controversy as to whether or not the low sodium diet above need be the only treatment for essential hypertension. A critical study of the poor results which are occasionally reported usually indicates insufficient observation time, paucity of cases or inadequate control of the sodium intake. Usually the sodium intake can be shown to be well in excess of 200 milligrams.

There is no question but that low sodium diets are only a part of the treatment and cardiac, renal, endocrine and psychic factors must be considered. In view of the work already reported, however, no one can deny the importance of the low sodium diet in the therapy of hypertension. Where there is any use of mercurial diuretics this diet is contraindicated.

SUMMARY

1. A simple method of reducing the sodium content of sodium rich meats, fish, fowl and vegetables has been described.

2. By using this method, a sodium diet of less than 100 milligrams a day may be constructed.

3. This diet is palatable and variable and can be maintained over a long period.

4. Patients receive more than 40 grams of protein a day.

5. This diet can be made to vary from 1500 calories to 3000 calories daily.

6. It is effective in hypertension.

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TEST FOR ADDISON'S DISEASE

A simplified water-loading test† for the diagnosis of adrenocortical insufficiency or hypopituitrism has recently been described, based on the well-established fact that diuresis is inadequate after water-loading in these two conditions. The test consists in having the fasting patient void at 8 a.m., following which he drinks 1500 c.c. (one and a half quarts) of tap water over a 15 to 20 minute period. All urine voided in the next five hours is collected and its volume measured. Normals will be found to excrete more than 1200 c.c. under these circumstances, compared to less than 800 c.c. for patients with hypoadrenalism or hypopituitrism. The administration of cortisone to the former and corticotrophin to the latter produced significant improvement in water tolerance as measured by the increased output of urine with this test.

This test is simple, can be carried out as an office procedure, and deserves further study as an aid in diagnosing these two endocrine deficiencies.

† Soffer, L. J., and Gabrilove, J. L.: A Simplified Water-Loading Test for the Diagnosis of Addison's Disease. Metabolism 1:504, November 1952.

AURICULAR FLUTTER AND FLUTTER-FIBRILLATION ASSOCIATED WITH INTRAVENTRICULAR BLOCK TO RESEMBLE PAROXYSMAL VENTRICULAR TACHYCARDIA

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Auricular flutter and flutter-fibrillation when associated with a bundle branch block may produce electrocardiographic findings which simulate paroxysmal ventricular tachycardia. Two cases are presented which illustrate this situation. The solution, prognosis, and therapy involved in this problem are discussed.

Electrocardiographic patterns that resemble paroxysmal ventricular tachycardia are mentioned only sporadically in the literature. Yet, this problem occurs often enough in electrocardiography to be worthy of greater interest. It is recognized that a supraventricular tachycardia associated with an intraventricular conduction disturbance can mimic the pattern of ventricular tachycardia so closely as to be indistinguishable from it. Tracings of this character may tax the skill of the most experienced electrocardiographer.

In 1942 Butterworth and Poindexter [1] demonstrated that auricular flutter with bizarre QRS complexes may be mistaken for ventricular tachycardia. They felt that the condition was inadequately discussed in the literature and was frequently unrecognized. In 1947, Katz [2] stated that paroxysmal ventricular tachycardia may be simulated by the supraventricular form accompanied by intraventricular block or by aberrant ventricular conduction. In one instance, he demonstrated an auricular flutter with 2:1 conduction and left bundle branch block resembling ventricular tachycardia; in another, auricular fibrillation, which, when it occurred with a transient intraventricular block offered the same diagnostic problem. In the same year, Gouaux and Ashman [3] reported a case of auricular fibrillation with ventricular aberration simulating paroxysmal ventricular tachycardia. Several years later, Langendorf [4] reported a case of auricular fibrillation with anomalous auriculoventricular conduction (Wolff - Parkinson - White syndrome) simulating ventricular paroxysmal tachycardia. Recently, Dressler and Roesler [5] reported a similar experience in making a differential diagnosis between these two types of electrocardiographic patterns.

In spite of the above reported cases, several textbooks fail to mention the problem or to emphasize it adequately. Therefore, the following two cases are being reported to assist in clarifying the problem and to supplement the cases cited above.

CASE REPORTS

No. 1. A. F., a 48-year old male, was admitted to St. Francis Hospital on July 8, 1952 with a history of recurrent attacks of precordial pain and dyspnea of two weeks' duration. He had been under the care of his family physician for hypertension for the past several years. On physical examination he appeared acutely ill with orthopnea, a pale, dusky cyanosis and profuse diaphoresis. Auscultation revealed a ventricular rate of about 180 with an irregular rhythm and good heart tones. Some crepitant rales were noted at the right base; otherwise, there were no other signs of heart failure. Blood pressure was 140/85; temperature, 101.4° F.; pulse, 180 per minute; respirations, 26 per minute. Therapy consisted of oxygen by mask, digitoxin 0.6 mg. immediately, 0.4 mg. every four hours for four doses and then 0.2 mg. once daily, plus penicillin, 600,000 units intramuscularly at once.

Laboratory studies: On July 9, 1952 a complete blood count showed 100 per cent hemoglobin with 4.93 million red cells and 11,310 white cells; urine: 2 plus albumin, with finely granular casts and a specific gravity of 1.024; blood chemistry showed blood urea nitrogen 23.4 mg. per cent, creatinine 1.5, non-protein nitrogen 50, blood sugar 105 mg. per cent; the sedimentation rate (Westergren) was 55 millimeters per hour.

An electrocardiogram taken on July 9, 1952 (Fig. 1A) showed a tachycardia with a ventricular rate of 174 per minute which was suggestive of the

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paroxysmal ventricular type. However, on careful analysis it was believed to be an auricular flutter with a 2:1 block. Suggestive flutter waves were noted in lead 2; more definite flutter waves were seen in lead AVF. At the time of this tracing, the patient was desperately ill with profuse diaphoresis, orthopnea, dusky cyanosis and a temperature of 102.4°F. Morphine sulphate, 15 mg. (gr. ¼) was administered and about a half hour later the heart and pulse rate dropped to 84 per minute and the patient felt better. The following day the patient was remarkably improved and on July 11 the temperature returned to normal. On July 17 a repeat electrocardiogram (Fig. 1B) showed an auricular fibrillation with a left bundle branch block and suggestive complete auriculo-ventricular dissociation with a ventricular rate of 50 per minute. In lead 1 a normal ventricular complex is noted. Apparently, the auricular flutter had converted to auricular fibrillation. On July 19 the patient had sufficiently recovered to be discharged from the hospital.

(Tracings in 1A and 1B are slightly retouched.)

No. 2. S. P., a 68-year old white male, was admitted to St. Francis Hospital on September 29, 1952, with chief complaints of epigastric pain, nausea and vomiting and shortness of breath for the past four days. In addition, he had noted swelling of the ankles of two weeks' duration. On admission, it was noted that the patient was orthopneic, had basal lung rales, a palpable, tender liver and three plus ankle edema. He was obviously in congestive failure. The following morning the dyspnea suddenly became worse and the patient developed a profuse diaphoresis with cold, clammy skin. Auscultation revealed an irregular cardiac rhythm and a heart rate of about 170. An electro-

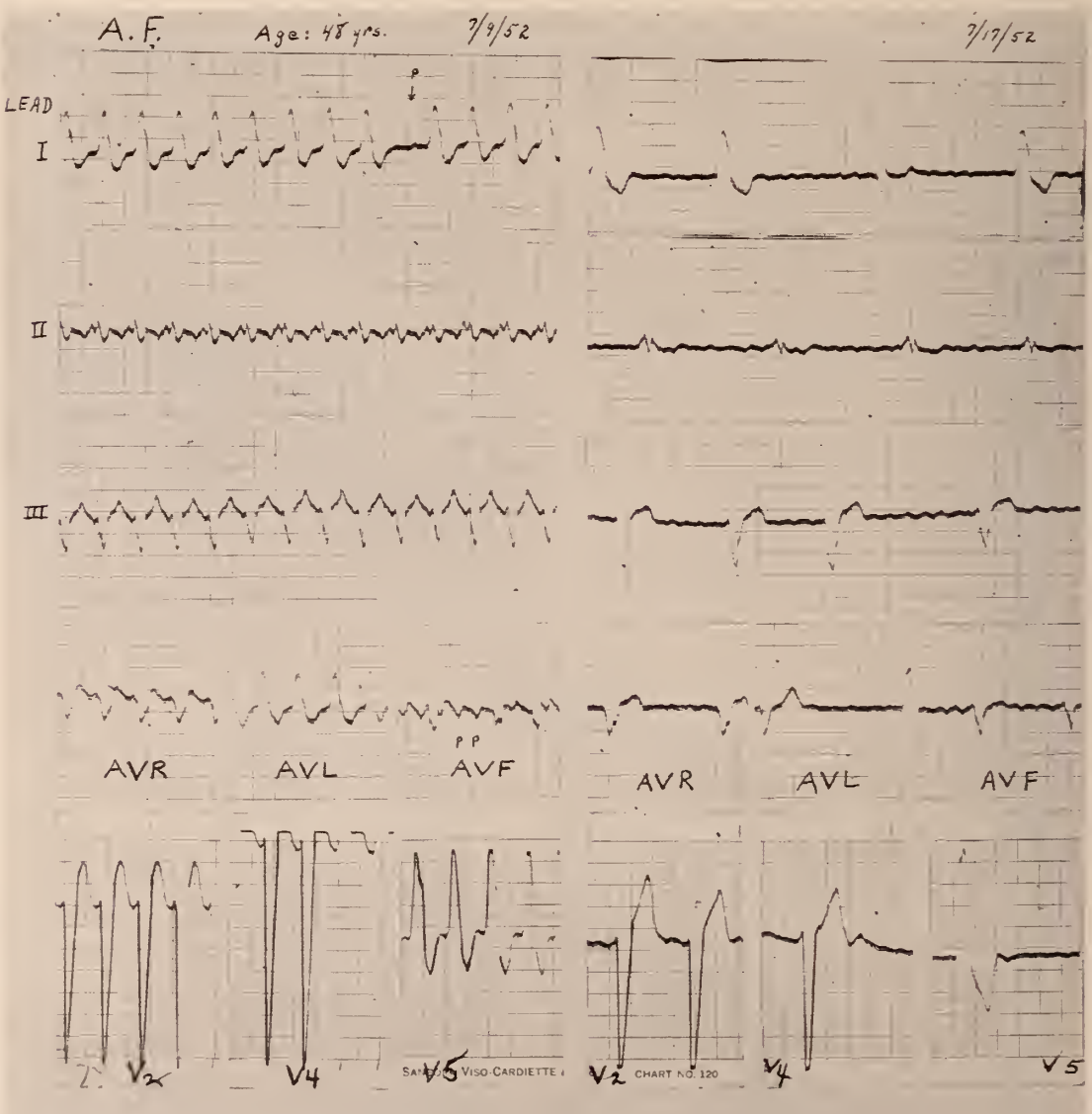


Fig. 1A. See text for Discussion

1 B.

cardiogram (Fig. 2A) showed a pattern, especially in lead 3, which was suggestive of paroxysmal ventricular tachycardia. On closer inspection a flutter wave was noted in lead 2 and suggestive fibrillation waves in some of the other leads. This tracing was interpreted as representing auricular flutter-fibrillation with intraventricular block.

In view of the fact that the patient was in cardiac failure and had never received digitalis, he was given 0.7 mg. of Crystodigin® intravenously immediately. Quadrilateral tourniquets were then applied. At this time the patient's condition appeared hopeless. About 30 minutes later it was noted that the tachycardia still persisted and obviously was not influenced by the digitoxin; therefore, it was decided to give the patient 0.2 gram (gr. 3) of quinidine sulphate intravenously. The blood pressure, which had been difficult to obtain, was recorded as 110/90, but the pulse remained rapid, thready and irregular. An additional 0.5 mg. of Crystodigin® was administered, but the patient's condition remained unchanged. At 4:00 p.m., four hours after the first dose of Crystodigin®, the patient received morphine, 10 mg. (gr. 1/6). One half hour later it was noted that the apex beat was 130 and still irregular. The patient appeared considerably improved. At 6:00 p.m., he received another 0.4 gram of quinidine sulphate intramuscularly, but the cardiac rate and rhythm remained unchanged. In addition to the above therapy the patient was administered 1.0 cc. of mercuhydrin intramuscularly and oxygen by mask.

An electrocardiographic tracing (Fig. 2B) taken the following morning showed an auricular flutter, with a block varying from 2:1 to 3:1, and a left bundle branch block. The auricular rate was around 260 and the ventricular rate approximately 104. The QRS interval measured 0.14 seconds. At this time, the patient was very much improved and he was placed on oral quinidine 0.2 gram four times a day and Crystodigin® 0.2 mg. daily. The following day the patient continued to improve and his heart and pulse rate were both 80. His dyspnea was relieved and his color was good. The ankle edema had disappeared. Quinidine was discontinued and the patient was maintained on 0.2 mg. of Crystodigin® daily plus 1.0 cc. of mercuhydrin per day.

X-ray of the chest on October 6 showed an enlarged heart with an aortic configuration, hilar

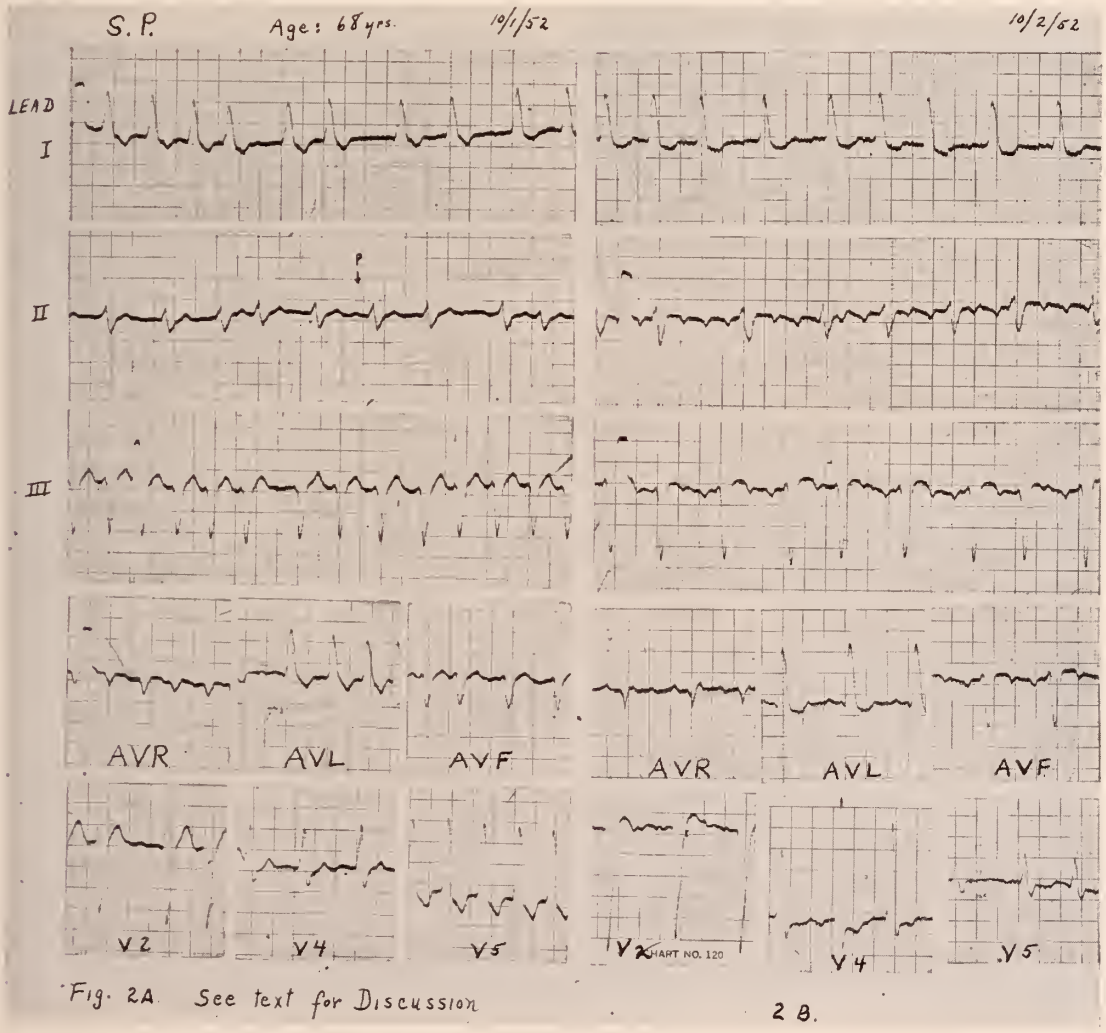


Fig. 2A See text for Discussion

2 B.

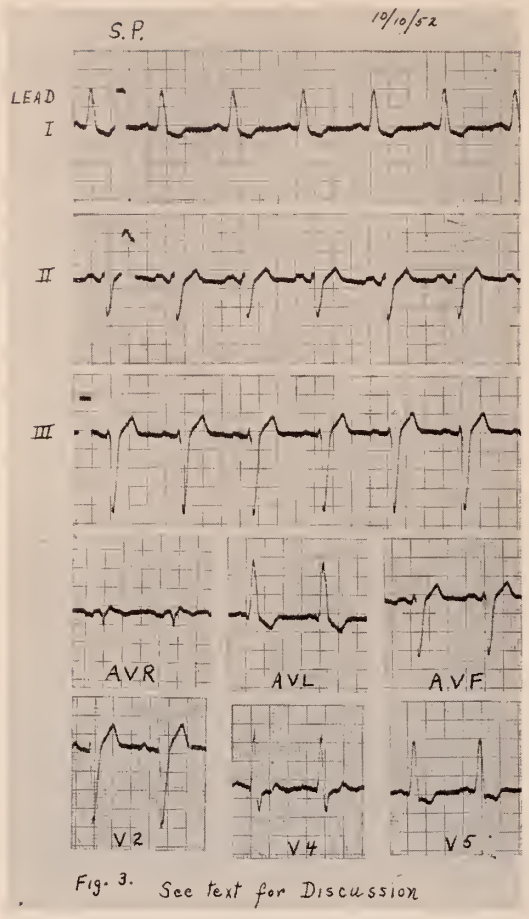


Fig. 3. See text for Discussion

congestion and some fluid in the right costophrenic angle.

An electrocardiogram (Fig. 3) on October 10 revealed a typical pattern of left bundle branch block with broad, notched P waves and a sinus rhythm.

Laboratory studies, including a complete blood count, blood sugar, non-protein nitrogen, urea nitrogen and urinalysis were normal.

The patient's condition improved steadily and on October 17 he was discharged.

DISCUSSION

It is apparent from the cases reported in this paper that electrocardiographic tracings that bear all the criteria of paroxysmal ventricular tachycardia require careful analysis to rule out combined auricular and ventricular arrhythmias. In many instances, this may be impossible in a single tracing, but subsequent tracings may indicate the real conduction disturbance. Butterworth and Poindexter [6] have shown that an exploratory electrode placed in the esophagus at the auricular level may be decisive in the differentiation of these arrhythmias. It has also been stated that auricular arrhythmias can sometimes be differentiated from those of ventricular origin clinically by the recognition of auricular waves in the jugular pulse. There seems to be no doubt that esophageal leads, whenever feasible, may be of value in establishing the true disturbance in rhythm.

In the past, the occurrence of simultaneous, independent auricular and ventricular arrhythmias, such as the combination of auricular fibrillation with ventricular paroxysmal tachycardia, has been reported in the literature.[7,8,9] While such conditions probably exist, in many instances it would be very difficult to prove. In view of the cases reported here, there is reason to believe that some of the cases of simultaneous, independent, auricular and ventricular arrhythmias reported in the literature may actually be dependent ones, in which the normal pathway of conduction from the auricles to the ventricles is intact or only partially blocked.

The determination of the clinical importance of arrhythmias that may resemble ventricular tachycardia is of considerable value from both a diagnostic and therapeutic standpoint. Basically, in all types of arrhythmias, the underlying disease process is of primary importance. It is generally accepted that paroxysmal ventricular tachycardia usually carries a serious prognosis and that the drug of choice for this condition is quinidine or Pronestyl®. However, in the cases presented here, quinidine would be contraindicated because of the intraventricular block. Furthermore, digitalis is generally considered as more desirable for the control of auricular flutter or fibrillation. If digitalis fails to produce a response in a reasonable period of time in critical situations, then quinidine therapy should be instituted. Morphine has also been reported as effective in many types of arrhythmias. In the two cases reported here it is noted that a slower rhythm was obtained soon after the administration of morphine. It is impossible to state that this effect was due entirely to this drug; nevertheless, it seems that it did serve a useful purpose in these instances. Certainly, this drug should not be withheld in critical situations such as the ones described here.

SUMMARY

1. Two cases are presented in which the electrocardiograms showed auricular flutter and flutter-fibrillation combined with intraventricular block; these presented a diagnostic problem because of the resemblance to paroxysmal ventricular tachycardia. The importance of distinguishing these two conditions is stressed.

2. Some of the clinical aspects of this problem are discussed. Digitalis appears to be the drug of choice in auricular flutter with intraventricular block; whereas quinidine is indicated in ventricular tachycardia. Prognosis is probably more serious in the latter.

3. It seems justifiable to conclude that all electrocardiograms which are interpreted as ventricular tachycardia should be carefully scrutinized, and whenever feasible esophageal leads should be taken in order to rule out a supraventricular tachycardia in the presence of aberrant ventricular conduction. There is reason to believe that this problem has often been unrecognized.

The assistance of Dr. J. Scott Butterworth in the interpretation of the electrocardiograms is gratefully acknowledged.

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STIGMONENE PREGNANCY TESTS

The relief of amenorrhea due to mental, emotional or physical stress by cholinergic drugs, and the failure of these drugs to induce menstruation in pregnancy has prompted Bookrajian and Truter† to investigate the use of Stigmonene Bromide® as a diagnostic test of pregnancy. Stigmonene Bromide® is a new cholinergic preparation which acts as an inhibitor of cholinesterase and is less toxic than compounds of the physostigmine group. Clinically it was not attended by undesirable side effects.

In order to be used as a pregnancy test, certain requirements must be met. The patients to be tested must have had regular menstrual periods before the onset of amenorrhea, there must be no evidence of menopause, and no organic pelvic disease. In a series of 100 patients who met these requirements, the Stigmonene test proved 100% accurate in predicting pregnancy in 83 women whose Ascheim-Zondek test was positive or fetal heart sounds were heard. In 17 non-pregnant women with amenorrhea the test was 94.1% accurate. The Stigmonene Bromide® test was harmless to gestation.

Details of the test consist in administering 1.0 cc. of a 1:1000 solution of Stigmonene Bromide® intramuscularly on three successive days. Pregnancy was assumed if there was no bleeding after the third injection.

This test, which is so easy and economic, and apparently quite accurate, requires further investigation before it becomes a general office procedure.

† Bookrajian, E. N., and Truter, W.: Stigmonene Bromide in the Diagnosis of Early Pregnancy and the Treatment of Simple Delayed Menstruation. Am. J. Med. Sc., October, 1952.

GLAUCOMATOUS OPTIC ATROPHY COMPLICATED BY SYPHILIS: CASE REPORT

LOUIS F. RAYMOND, M.D., East Orange, N. J.

Reversible glaucomatous optic atrophy with luetic optic neuritis is reported in this case study.

Optic atrophy has been classified [1] into two general groups, simple and inflammatory, for which there are four main causes: inflammation, degeneration, injuries, and compression.

In simple (primary) optic atrophy there is no replacement of nerve tissue; in the inflammatory type, however, nerve fibers are replaced by newly formed connective tissue. This differentiation may be made clinically. The former type of atrophy shows a pale, white disc in contrast to the gray appearance of inflammatory atrophy. Some common causes of primary atrophy include compression or severance of the optic nerve by bony fragments due to fracture, hemorrhages in the optic canal, tumors, arteriosclerosis of the carotid artery, and degeneration.

Inflammatory atrophy occurs in two forms: neuritic and ascending. Neuritic atrophy may result as a terminal stage of intraocular neuritis. The retina is involved as shown by slight shrinking of the disc. In ascending atrophy there is a waxy, yellowish appearance of the disc and the retinal vessels become extremely narrowed or even imperceptible.

Optic atrophy does not of necessity result in anopsia. This is because some fibers of the optic nerve may retain their function. It has been stated that normal visual acuity depends on the persistence of as little as 25 per cent of the macular fibers.

CASE REPORT

An 80-year old Negress was hospitalized because of progressive loss of vision of two years' duration. Her only other complaint was slight pain in the eyes.

Initial examination of the eyes showed the following: vision in the right eye, hand movements only; left eye, questionable hand movements. Light perception and projection were good in both eyes, which also showed arcus senilis and incipient cataracts. There was also bilateral argyrosis of the bulbar conjunctivae and bilateral tension (MacLean) 33, controlled with miotics. Examination of the fundi showed definite glaucomatous optic atrophy, more pronounced in the left eye, with sclerosis of the choroidal and retinal vessels.

Otherwise the physical examination was not remarkable except for generalized arteriosclerosis and arteriosclerotic heart disease with mild congestive failure.

Laboratory findings disclosed a positive serologic test for syphilis. A spinal tap showed negative Wassermann reaction, normal colloidal gold curve, and a normal cell count. The patient was treated with six million units of aqueous procaine penicillin over a ten-day period, digitalization, and accessory vitamins.

Four days after admission the patient's vision showed marked improvement so that she was able to recognize other patients in the ward and to carry out her normal daily activities. Her vision after treatment was right eye, 20/40; left eye 20/200 (central vision only, no peripheral vision).

DISCUSSION

Optic atrophy due to glaucoma may not necessarily be irreversible. Further investigation in this case revealed the presence of luetic optic neuritis, even though the cerebrospinal fluid was negative serologically. Intensive treatment of this patient's syphilitic infection resulted in significant improvement in her vision. The glaucoma remained unchanged but was readily controlled by miotics.

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EXPERIENCES WITH NEOHYDRIN®, AN ORAL MERCURIAL DIURETIC*

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Jersey City, N. J.

The value of Neohydrin® as an oral mercurial diuretic in place of the parenteral form is discussed. Mention is also made of therapeutic failures and toxicity.

An effective oral mercurial diuretic agent of low toxicity has been sought ever since calomel was introduced into clinical practice. Effective parenteral mercurial diuretics have contributed immeasurably to the physician's armamentarium in the treatment of congestive failure. However, the oral counterparts of these parenteral preparations have lacked diuretic potency sufficient to maintain any but mild congestive failure patients free of edema. Symptoms of gastrointestinal intolerance occurring with oral mercurials have further limited the usefulness of these medications.

Nuhfer and White[1,2] first reported a new mercurial diuretic, 3-chloromercuri-2-methoxypropylurea (Neohydrin®)†, to be at least four times as effective by oral administration as oral meralluride, mersalyl, mercaptomerin and mercurophylline when compared at the same dosage level in dogs. Handley, Chapman and Moyer[3] later reported Neohydrin® intravenously to be three to four times more effective than meralluride in animals and to possess, relative to toxicity, "a safety margin equal to or even greater than, mercurial diuretics currently used." More recently these and other authors have reported on the diuretic activity of this preparation, orally, in humans. Greiner, Gold, *et al.*[4] in human bioassay studies have shown that oral Neohydrin® is one-fourth as potent orally as it is parenterally and this potency by the oral route of administration approximates three-fourths the effectiveness of parenteral meralluride. The relative efficiency of previously available oral mercurials was reflected in the bioassay studies by the observation that oral mercurials other than Neohydrin® possessed no more than one-eleventh their parenteral potency.[4]

These data suggested that Neohydrin®, maintaining by far the highest ratio of oral to parenteral effectiveness, might obviate the use of parenteral mercurials in a considerable number of congestive failure patients. We have tested this hypothesis in a 12 month study in order to determine the place of Neohydrin® in the long term management of congestive failure.

MATERIALS AND METHODS

Neohydrin® was given to 32 chronic congestive failure patients registered in the cardiac clinic of the Jersey City Medical Center. Patients in this series were restricted to those who had previously required a minimum of one cubic centimeter of a mercurial diuretic administered parenterally each week in order to maintain satisfactory clinical status. Fifteen of the patients were men and 17 were women. The patients ranged in age from 30 to 77 years. Rheumatic (10), arteriosclerotic (2), and hypertensive heart disease (14) were present in this series; one patient had chronic cor pulmonale. Thirty patients were regarded as being in Grade III failure and two were in Grade IV failure (American Heart Association classification). Each patient had been maintained on a regimen which included restriction of physical activity, low sodium intake, digitoxin, enteric-coated ammonium chloride, and varying doses of mercurial drugs

* From the Cardiac Clinic, Department of Medicine, Jersey City Medical Center.
† Neohydrin® was kindly supplied by Dr. H. L. Daiell, Scientific Director, Lakeside Laboratories, Inc.

given parenterally. The dose of parenteral mercurial previously required for maintenance by these patients varied from 1 cc. to 12 cc. weekly. This regimen had been maintained for periods of one to eight years prior to the present study. Neohydrin® was given in tablets containing 18.3 mg. of the drug equivalent to 10 mg. mercury. Patients were evaluated clinically each week with emphasis on cardiac signs and symptoms, weight change, and evidence of gastrointestinal or other untoward reactions to therapy.

OBSERVATIONS

Diuretic efficacy. The diuretic effect of Neohydrin® was determined by its ability to maintain a satisfactory dry weight and freedom from symptoms, in comparison with results obtained with the previous parenteral mercurial. During the first week of treatment, there was a significant weight decrease in 22 (68.7%) of the patients (Table 1). This decrease was maintained. Three (9.3%) had no weight change, 7 (21.9%) had an increase in weight. Occasional edema fluid accumulation due to dietary indiscretions responded to Neohydrin® as previously it had to parenteral mercurials.

TABLE 1

AMOUNT OF WEIGHT LOST BY PATIENTS AT END OF FIRST WEEK

Weight Loss	Number of Patients
Less than 2 pounds	6
3 - 4 pounds	4
5 - 6 pounds	5
7 - 8 pounds	1
9 -10 pounds	4
11 -12 pounds	1
13 -14 pounds	1

Relative to the control of dyspnea, orthopnea, palpitation and ankle edema, results were judged as excellent if these factors became less troublesome, good if there was no change, and unsatisfactory if the patient became worse (Table 2).

TABLE 2

CLINICAL RESPONSE

Excellent	12 (37.5%)
Good	13 (40.6%)
Unsatisfactory	7 (21.9%)

Dosage. Initially an effort was made to provide the individual patient with an oral dose of mercury approximating the amount previously required parenterally. Mol per mol of mercury, Neohydrin® has been shown to be 71 per cent as effective as meralluride parenterally.[4] In our study, patients who had required from 1 to 3 cc. of parenteral mercurials per week were found in general to respond excellently to from 1 to 3 tablets of Neohydrin® daily (Table 3).

In the majority of those patients who had required 4 cc. or more of parenteral diuretics weekly, Neohydrin® could be substituted successfully. In this latter group, however, dosage was considerably more variable and the seven who did not respond to Neohydrin® were among these patients. In all cases in which Neohydrin® obviated the need for parenteral mercurials it was found that a continuous daily intake of tablets was more effective than an interrupted schedule.

Side Effects. The patients in this series were evaluated frequently for gingival lesions and the presence of anorexia, nausea, vomit-

TABLE 3

RESULTS WITH NEOHYDRIN® IN REFERENCE TO PREVIOUS PARENTERAL REQUIREMENT OF MERCURY

Amount of Parenteral Mercurial Previously Required per Week	Total No. of Patients	Patients Responding to Neohydrin®		Daily Neohydrin® Dosage
		Number	Per Cent	
12 cc. (480 mg. Hg.)	2	1	50%)	3-6
6 cc. (240 mg. Hg.)	7	4	57%)	tablets
4 cc. (160 mg. Hg.)	10	7	70%)	
3 cc. (120 mg. Hg.)	3	3	100%)	1-3
2 cc. (80 mg. Hg.)	6	6	100%)	tablets
1 cc. (40 mg. Hg.)	4	4	100%)	

ing, diarrhea, constipation, abdominal cramps, or cramps in the leg muscles.

Two patients had severe gastrointestinal reactions and one patient with a duodenal ulcer manifested a recurrence of ulcer symptoms which subsided upon discontinuance of the oral mercurial. A 70-year old housewife with arteriosclerotic heart disease, Grade III, previously receiving 6 cc. of injectable mercurial weekly, developed vomiting while receiving 1 tablet daily. A 30-year old housewife with rheumatic heart disease, Grade IV, requiring 12 cc. of injectable mercurial weekly, developed nausea, vomiting, and diarrhea on 4 tablets daily. In regard to gastrointestinal sensitivity, it should be mentioned that an improvement in appetite was noted in four of the patients transferred from parenteral mercurials to the oral preparation.

Two patients complained of mild leg cramps while maintained on one tablet daily. These cramps had not been present during parenteral mercurial administration; however, they were not sufficiently severe to cause the patient to be returned to parenteral therapy.

None of the patients developed skin eruptions, pruritis, headache or other systemic reactions following ingestion of Neohydrin®.

Psychologic Aspects. Transfer of the chronic congestive failure patient from parenteral to oral mercurial therapy affords confidence and comfort to the patient, facilitating the long term management of the disease. Sometimes, however, the problem of discontinuance of oral medication by the patient arises; consequently, constant supervision is needed. Of the group reporting improvement (25 patients), only 1 had a poor diuretic response and gained weight. In the patients reporting no response (7 patients), two had a good diuresis and loss of weight. Apparently, injections impress some patients and depress others without relation to their efficacy.

SUMMARY

1. Studies of the oral administration of 3-chloromercuri-3-methoxypropylurea (Neohydrin®) to 32 ambulatory patients with chronic congestive failure over a period of one year are reported.

2. Neohydrin® was effective in completely replacing parenteral mercurials in 27 (78%) cases.

3. Increases in weight and recurrence of symptoms occurred in 7 (21.9%) patients.

4. Patients who had previously required from 1 to 3 cc. weekly of parenteral mercurials responded excellently to 1 to 3 tablets of Neohyrin® daily.

5. In 2 cases (6.9%) Neohydrin® was discontinued because of untoward gastrointestinal reactions.

The authors are greatful to Dr. Carroll M. Leevy for suggestions and advice in this study.

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THE RELIEF OF ALLERGIC DISORDERS WITH A DOUBLE CALCIUM AND PHOSPHATE SALT*

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Calcium is a well-known agent for the relief of allergic manifestations, but its efficacy has never been clearly established. The successful application of a double calcium and phosphate salt to this problem is described in a preliminary report.

The value of calcium in atopic disorders has been the subject of considerable controversy. While extensively employed for some time, the response has been variable. Some investigators have assumed that there is an actual or relative calcium deficiency in allergies, based upon the belief that increased capillary permeability due to such a deficiency constitutes a fundamental characteristic of the pathologic physiology of hypersensitivity. Hanzlick [1] as early as 1924, in a review of the problem of allergy, expressed the view that calcium prevents or inhibits experimental edema and clinical allergic manifestations owing to its power to lessen cellular permeability. This he saw as an indirect indication of the possible physical basis for the allergic reactions produced by various agents. Brown and Hunter [2] contend that an actual calcium deficiency exists in a large proportion of patients with atopic disorders. Our experience with various calcium solutions has been consistently disappointing.

Through various reports in the literature [3,4,7,8] attention was directed to the possible greater utilization of a double calcium and phosphate salt which seemed worthy of study in various atopic conditions.

Lubowe [3] observes that therapeutic results with the various commercially available calcium salts are more or less limited by the difficulty in retaining injected calcium for a period of time sufficient to produce a clinically demonstrable response. The same author in another publication [4] calls attention to the use of a specially processed solution of calcium glycerophosphate and calcium lactate (Calphosan®†) which he has found effective in a variety of allergic dermatoses and concludes [3] that the use of this vehicle "may be a vital factor in reducing cutaneous irritability" and that it "enables the clinician to evaluate the full therapeutic effect of calcium and opens the door to extensive studies in a wide range of other therapeutic indications."

We have been using Calphosan® in a large number of cases for a considerable period of time and have found it to possess certain advantages not found in other injectable calcium prepartions. In none of our cases have we encountered undesirable side effects or any form of skin damage although we have consistently given it fairly rapidly in 10 cc. and 20 cc. doses intramuscularly and subcutaneously. In no instance has a patient complained of pain caused by such injections. Compared to previous experience with other calcium solutions, which are usually quite painful and carry the danger of causing induration, necrosis and sloughing when given into the muscle or the hazard of extravasation when given into the vein, we considered this absence of pain a substantial advantage. This has also been the finding of Abrahamson [7] and Hoffman, *et al.*[8]

In our cases, upon the administration of Calphosan® we noted an incidental dimunition of nervous tension and instability which, in turn, apparently aided the patient to develop a more

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† Calphosan® was furnished by courtesy of The Carlton Corporation, New York, N. Y., and is a specially processed solution of calcium glycerophosphate and calcium lactate containing 1% of the ester and salt in normal saline with 0.25% phenol.

favorable mental outlook and a feeling of well being. This seemed to be a desirable response since it is well known that patients suffering with allergies are usually under considerable stress, to a great extent induced by the nature of their symptoms and more particularly by the failure of numerous therapeutic measures to which they have been subjected. A lowering of the psychogenic and neurogenic activity of the disease, together with the speedy reduction of itching, is perhaps one of the contributory factors to the results obtained. Liebner [5] surmised that the influence of calcium on the tone of the autonomic nervous system may be another factor in reducing cutaneous irritability.

We are reporting the following nine cases out of a considerably larger series because each seemed to offer a particularly difficult therapeutic problem and is typical of the type of cases generally encountered.

CASE REPORTS

No. 1. A 35-year old housewife knew that she was allergic to certain green vegetables, dog and cat dander and several grasses. At the time of her first visit to the clinic she had an acute flare-up of a sinusitis which apparently also activated her allergy. She was treated for her sinus condition and was given two 10 cc. injections of Calphosan® subcutaneously. The response was dramatic even before the second injection. Subsequently she wrote: "The dog is back home (for the children) and he didn't bother me a bit but I can remember when it was misery". She returned for two 10 cc. injections before Christmas, which carried her symptom-free over the holiday season since she is also sensitive to Christmas trees.

No. 2. A 42-year old white male executive complained of severe sneezing attacks during the spring and fall, associated with difficulty in breathing and watery nasal discharge. Three 10 cc. injections of Calphosan® subcutaneously two days apart, in the spring and fall have completely relieved his symptoms.

No. 3. A 19-year old student nurse developed a severe drug sensitivity on both her hands during her last year of training. She had extensive dermatologic treatment without securing relief. She was given 10 cc. Calphosan® subcutaneously every other day and in one week the redness, swelling and thickening of the skin of her hands subsided to such a degree that she was able to resume her training.

No. 4. A 38-year old television entertainer, because of his role, had to dye his hair. Following a "touch-up", his scalp began to itch intensely and a few hours later his entire scalp was covered with excoriated, inflamed and crusted lesions. Wherever the weeping came in contact with his skin, a papular rash appeared which in a day or so spread down his neck, back, arms and hands. The patient was given various treatments at the very onset of the condition but it continued to advance. The fifth day he was given two 10 cc. Calphosan® injections intragluteally. Within a half hour the severely weeping or actually dripping scalp lesions had dried. The intense itching of the neck, scalp and arms subsided. The patient was given daily 10 cc. injections of Calphosan® for four days and then staggered 10 cc. injections for ten days, when all treatment was discontinued since all of the lesions had healed.

No. 5. A 55-year old physician for years had suffered severe sneezing episodes invariably following the ingestion of any foods that contained vanilla extract to which he was sensitive. Following two injections of 10 cc. of Calphosan® subcutaneously all symptoms subsided. He now takes one 10 cc. injection of Calphosan® at the onset of symptoms when he unwittingly ingests anything containing vanilla extract and is thus able to control and curtail the sneezing episodes.

No. 6. A 48-year old housewife complained of an oppressive stuffiness of her head and nose that persisted for some months. She had a subacute sinusitis and one moderately large nasal polyp just below the middle turbinate. Her sinusitis was treated but she refused removal of the polyp at that time, preferring to leave this to be done on her subsequent visit. Patient was given two 10 cc. injections of Calphosan® intragluteally. On her next visit the nasal mucosa appeared healthy. Her symptoms had subsided and the polyp was no longer evident. She returns periodically for Calphosan® injections at the onset of symptoms and thus curtails her symptoms and distress.

No. 7. A 40-year old housewife presented herself with an unusually severe angioneurotic edema. The swelling involved the face, lips, hands, legs and feet, apparently caused by previous administration of penicillin. She was given 10 cc. of Calphosan® subcutaneously on two successive days and the response was dramatic. All symptoms subsided completely.

No. 9. A 59-year old male complained of severe difficulty with various allergies that had continued for many years. He had never been able to secure relief from previous therapy. He was given two 10 cc. injections of Calphosan® intramuscularly followed by one 10 cc. injection subcutaneously. He was greatly improved before the second visit; for the first time in seven years he said he could breathe without difficulty. He is now maintained on one 10 cc. injection weekly and is able to work for the first time in several years.

No. 9. A 38-year old housewife complained of great difficulty in breathing and severe asthmatic attacks whenever she laughed. She had a chronic

sinusitis with nasal polyps bilaterally. The sinuses were treated, the polyps removed and the patient was given 20 cc. of Calphosan® in two intramuscular injections. The difficulty in breathing disappeared within a few days and after the fourth 10 cc. injections of Calphosan® her asthma subsided to an occasional heavy breathing which is now gradually disappearing.

DISCUSSION

It will be noted that we have given this preparation subcutaneously, intragluteally and intramuscularly in what may be considered rather massive doses. We have found in each instance that these injections were well tolerated and rapidly absorbed in all cases to such an extent that not even a lump was noted at the site of the injection.

These cases raise the question: Does Calphosan® desensitize and thus allay the symptoms, or by raising the blood calcium level do we eliminate the sensitivity? Further study along this line seems advisable.

We were able to make calcium determinations in 75 per cent of our cases and found serum calcium to be invariably low. Determinations made subsequent to the administration of Calphosan® (3 to 7 days after injections) all showed normal or near normal calcium levels.

These cases and others similarly treated at the clinic and in private practice indicate that this preparation, due perhaps to better absorption exerts a profound influence on cellular function and on physiologic phenomena which may be altered by a variety of causes. This may be due to the recent demonstration[6] that calcium is best utilized to the extent that phosphate is also present. This preparation contains calcium and phosphate in a one to one ratio that apparently approximates the necessary balance for more adequate utilization than solutions containing only single or double calcium salts without the presence of phosphate.

Our experience indicates that this combination seems safer to use and is more effective in alleviating symptoms than other therapeutic measures, including the use of antihistaminics, where cross sensitization may be encountered.[9]

SUMMARY

1. Nine cases of atopic disorders of varying severity are presented where the use of Calphosan®, a calcium glycerophosphate and a calcium lactate solution, produced relief of symptoms.

2. The results were more rapid and more satisfactory than those obtained with other drugs, including the antihistaminics.

3. The results indicate a better therapeutic effect with this combination of calcium salts and phosphate than with other single or double calcium salts due, perhaps, to better utilization because of the presence of phosphate.

4. A noticeable soothing effect on the nervous system and the absence of pain and side effects on intramuscular and subcutaneous administration of Calphosan® are stressed as an adjunct to the therapeutic response obtained.

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STATE ACTIVITIES

TRUSTEES' MEETING

APRIL 12, 1953

A regular meeting of the Board of Trustees was held on Sunday, April 12, at the Executive Offices, Trenton. The following is a summary of the principal actions taken by the Board at this meeting:

In recognition of the fact that Mrs. Edith L. Madden, Administrative Secretary, is this year completing twenty years of service to the Society, the Board authorized the president to purchase an appropriate gift to be presented to Mrs. Madden as an expression of appreciation.

A motion that the Society establish the custom of presenting a key to each past-president of the Woman's Auxiliary as a token of honored service to the Society was approved, with the direction that all living past-presidents be made recipients of a key at an appropriate time during the coming annual meeting.

Approval was given to the nomination of Lloyd N. Yepsen, Ph.D., Director of the Division of Mental Deficiency of the New Jersey State Department of Institutions and Agencies, for honorary membership in the State Society.

The Board approved a motion extending the appointment of Dr. Rowland D. Goodman, 2d as acting editor of THE JOURNAL to the end of the fiscal year.

A motion authorizing the appointment of a qualified parliamentarian, other than an M.D., to serve at the 1953 sessions of the House of Delegates was approved.

The Medical-Surgical Plan of New Jersey has asked the cooperation of the Society in determining whether six private hospitals in the State fall into the emergency category which makes them eligible to participate under the Hospital Service Plan and makes patients treated in those hospitals eligible for Medical-Surgical Plan benefits. Pending the determination of the status of these institutions which has been referred to the county societies involved, the Board approved a motion to continue payment under Blue Cross and Blue Shield to the six hospitals in question, on the basis of local emergencies, until November 1, 1953, or such earlier date as the determination of their status may indicate.

With reference to the report of the Finance and Budget Committee the Board approved the following recommendations:

1. That the present method of transfer of supplies and telephone costs be eliminated and that such charges as exceed the A-3 budget be prorated to other accounts by the Executive Officer and the Administrative Secretary.

2. That fire and extended insurance coverage on the property of the Society be increased to $120,000 on the main building, $15,000 on the garage apartment, and $25,000 on the furniture and fixtures.

3. That the Owner's, Landlord's, and Tenant's Liability coverage be increased from $25/$50,000 to $50/$100,000.

The Board further recommended that the account of the president be made sufficient to include the expenses of other officers of the State Society in the performance of their official duties, and it further directed that the account be titled "President and Other Officers."

The Board approved a libel and slander insurance policy in the amount of $300,000 covering the officers and official spokesmen of the Society and embracing all the various official media of publication of the Society. It further instructed that all county societies be notified of the availability of such policies.

Approval was given to the recommendation of the Finance and Budget Committee that legal counsel to the Society be no longer engaged on a retainer basis, but rather on a fee for service basis, effective at the beginning of the next fiscal year.

The committee submitted a proposed amendment to the charter of the Society which would delete the limitation dealing with annual income. The Board approved the proposed amendment and referred it to the Subcommittee on Legislation for introduction into the Legislature at the proper time. The report of the Finance and Budget Committee was then approved as a whole.

In conjunction with the report of the Welfare Committee the Board approved the following recommendations with reference to the business of the subcommittees:

A. *Legislation*

1. That approval be given to the work done by the Subcommittee on Legislation in advising Assemblyman Saiber concerning the preparation of A-120, to permit certain New Jersey resident physicians not graduates of approved medical schools to sit for state board licensure.

2. That because of the complex nature of the matters involved, the Subcommittee on Legislation further study the problem of admission of graduates of foreign medical schools to examination for licensure in New Jersey, with a view toward making constructive suggestions for the preparation of satisfactory legislation.

3. That approval be given to the action of the subcommittee in its endeavors to make clear to the legislators that The Medical Society of New Jersey strongly opposes S-202, and, though not approving, does not oppose A-456.

4. That the recommendation of the subcommittee favoring the principle of mandatory licensing for nurses be approved, and that the subcommittee be given authority to study further the details of the bill, A-623.

B. *Public Health*

1. That the plan of education outlined by the Advisory Committee on Rehabilitation be approved, whereby a series of articles on various phases of rehabilitation in the State would be prepared and published in THE JOURNAL, each article to be followed by the names of the members of the advisory committee.

2. That the recommendation of the Advisory Committee on Maternal Welfare that the State Department of Health continue the printing and distribution of prenatal history cards, available to physicians upon request, be approved.

3. That approval be given for a pilot study of neonatal mortality in New Jersey, and that the Advisory Committee on Maternal Welfare be requested to consult with the Medical-Hospital Liaison Committee concerning means of implementing the program. The forms to be used in conducting the study are to be printed by the Medical Society and distributed through the hospitals.

4. That the recommendation of the Advisory Committee on School Health for the establishment of a school record card be approved in principle, pending receipt of more detailed information.

5. That the study concerning "standards for vision and hearing testing of school children" being made by the Advisory Committee on the Conservation of Vision and Hearing be approved in principle, pending receipt of detailed information.

6. That the following recommendations from the Advisory Committee on the Chronically Ill be approved:

(a) That each county medical society which has not already done so establish a Committee on the Chronically Ill;

(b) That liaison be established with other committees within county medical societies concerned with aspects of the program of the chronically ill;

(c) That the county Committee on the Chronically Ill be responsible for establishing cooperation among existing health and welfare agencies, and participate with such agencies in the formation of local health councils;

(d) That such county committees be known as "the Committee on the Chronically Ill" rather than "the Committe on the Care of the Chronically Ill."

7. In response to a request from the Advisory Committee on Mental Hygiene for approval and endorsement of the work of the New Jersey Association for Mental Health, the recommendation that The Medical Society of New Jersey do not endorse any organization in the determination of whose policies it does not have a voice, but that after consideration of the program, principles, and policies of such organization, the Society be free to appoint some of its members to function in an advisory capacity, such appointment in no way to imply endorsement of any program.

8. That the conclusions of the Conference on the Use, Availability, and Distribution of Gamma Globulin, as recommended by the Subcommittee on Public Health, be accepted and used for purposes of publicity and information as representing the conclusions of The Medical Society of New Jersey.

9. That approval be given the proposed routine health maintenance program suggested by the subcommittee, and that it be further studied and developed; moreover, that in the field of chronic illness an educational program for physicians and the public be considered and explored.

10. That the request from the American National Red Cross for approval to dispense ferrous sulphate and molybdenum oxide to women blood donors be denied, and the following statement made: "That we do not approve of the free distribution of medication by the Red Cross as part of the blood donor program."

C. *Public Relations*

1. That each of the twenty-one component county societies appoint an Orientation Committe, if one such does not already exist, the specific purpose of which will be to indoctrinate new members in the accepted concepts of organized medicine as regards their rights, privileges, and responsibilities.

Under the heading of correspondence the following matters were dealt with:

1. The Board approved a recommendation of the Subcommittee on Medical Practice that the Society concur in the fee schedule estab-

lished by Medical-Surgical Plan, and in instances where Medical-Surgical Plan has established no fees, that those fees recommended by the specialty groups be adopted.

2. The Board approved the action of the Subcommittee on Medical Practice whereby it recorded approval of the action of the A.M.A. House of Delegates in adopting the report of its reference committee which recommended that the Board of Trustees of the A.M.A. confer with the American Board of Oral (Dental) Surgery to the end that a clear definition of medical and dental services be established.

3. Approval was given by the Board to recommendations emanating from the Subcommittee on Medical Practice with reference to the setting of fees for medical and/or surgical services rendered under Workmen's Compensation. These recommendations follow:

(a) The fees should be reasonable in relation to the standards obtaining in the locality in which the services are rendered;

(b) The fees should be those usually charged for the same treatment or operation in a given community;

(c) The fees should not be "written up" just because the case comes under Workmen's Compensation, nor should the employer "write down" the fees charged by the community doctors.

The Board also approved the following motion in conjunction with fees under Workmen's Compensation: Fees in dispute should be referred to the proper committee of the county society for review.

4. The Board authorized that the Society serve as one of the sponsoring agencies for the Fourth Workshop in Health Education, to be held in the early summer of 1953.

5. Dr. Vincent P. Butler was nominated by the Board for re-election to the Board of Trustees of Hospital Service Plan.

6. The Board approved a motion that "in view of the dire need of funds for medical education and the fact that New Jersey citizens are admitted only to certain medical schools throughout the country and that the tuition which they pay does not defray the entire cost of their education, the Society donate, through the American Medical Education Foundation, the sum of $25,000 to be allotted to those schools educating students from New Jersey and to be prorated as far as possible according to the number of New Jersey students attending those schools."

HADDON HALL HIGHLIGHTS

Judging by the number of physicians crowding the registration desk at Haddon Hall on Sunday, May 17, the entire membership of our society seemed to be at the Annual Meeting. However, statistics belie impressions, so these notes are intended to inform those who were unable to attend, and to refresh the memories of those who did get to Atlantic City this year.

Sunday, May 17

The opening day offered ideal weather for habitués of the beach; the boardwalk provided stiff competition to the business of the day, conducted within the confines of Haddon Hall. Registration started in the morning, followed by a meeting of the Board of Trustees which ended in time for the first meeting of the House of Delegates at 2:30 p.m. This meeting was relatively brief; several resolutions from county societies were offered and referred to appropriate reference committees. Dr. Harrold Murray presided, with Drs. Benjamin Lee of Camden and Frank Forte of Newark serving as sergeants-at-arms. Mr. William E. Bardusch, Jr., insured orderly conduct of this and later meetings as parliamentarian. An hour was devoted to a full discussion of Medical-Surgical Plan.

Following the first session of the House of Delegates, members were free to roam as they wished. The Woman's Auxiliary held a dinner for its Fellowettes at 6:30. Sunday evening the Nominating Committee met to propose a list of officers for the forthcoming year.

Monday, May 18

By the time most conventioneers arose, the Annual Meeting was in full swing. The educational, scientific, and technical exhibits were open and attracting wide interest. This was justifiable, since the exhibits this year achieved a high level of excellence.

Among the scientific exhibits many were outstanding because of the interest of the material displayed, unique methods of demonstration, or presentation of new data. Two exhibits concerning cardiac surgery, both stemming from work done at Hahnemann Medical College and Hospital, Philadelphia, were stimulating and informative, and indicated the far-reaching advances that have been made in this

field. Virtually every valvular and congenital defect is now under surgical attack, with varying degrees of success. These are pioneer steps, and the day may well arrive when cardiac surgery is no more formidable than a present-day appendectomy.

The exhibit concerning hepatic abnormalities in congestive failure from the Jersey City Medical Center drew attention to an important and often neglected aspect of cardiac disease. The material indicated careful research and study, and was presented with utmost clarity.

Unique methods of displaying scientific material were presented in the exhibit on acute massive peptic ulcer hemorrhage from Temple University School of Medicine, and in the sigmoidoscopy exhibit from the Packer Clinic. Dr. Lynn's exhibit concerning esophageal atresia was also excellent.

The ladies attending the convention were swept away by the Heart Saver Kitchen, presented by the New Jersey Heart Association, just adjacent to the registration desk. This dream kitchen contained the ultimate in labor saving devices, arranged for a minimal amount of physical labor. Husbands wisely kept their admiration to themselves—after all, there is a limit to what attending a convention can cost!

Technical exhibits commanded no less attention than the scientific and educational ones. Noteworthy was the courtesy and patience with which commercial representatives greeted the members and answered their questions.

At 10 in the morning the scientific meetings started, with the sections on heart diseases and surgery first. At the same time the reference committees began their deliberations. The committee that worked the hardest was undoubtedly "C," which spent the entire day and far into the night considering the reports of the Medical-Surgical Plan. If ever a piece of legislation underwent dissection, this did! No post-mortem could compare to the searching inquiries made into the aims, methods, and programs of the Plan. Its representatives, particularly Dr. Royal A. Schaaf, answered questions until every detail had been appraised, evaluated, or elucidated. The other Reference Committees also had their share of legislative fun, although of somewhat briefer duration.

The remainder of Monday was devoted to a short House of Delegates meeting, Auxiliary affairs, and continuing scientific meetings.

Following the technical exhibitors' dinner at 6 p.m., the General Session convened at 8. At that meeting, The Medical Society of New Jersey presented $25,000 to the American Medical Education Foundation. The donation was accepted by Dr. George F. Lull, Secretary and General Manager of the American Medical Association.

Dr. Decker then made his inaugural address, which will appear in the annual Transactions in August, and Stephen C. Y. Pan, Director of the Institute of Far Eastern Studies, Seton Hall University, spoke on the place of the Far East in the future of America.

Tuesday, May 19

The weather was disappointing on Tuesday, but it did not interfere with the day's activities. At 9:30 a.m. the House of Delegates held its final meeting. This was an active one as each reference committee presented its report for final adoption. At one point a roll call vote was required, so close were the voice and standing votes. An honorary membership in our society was conferred on Lloyd N. Yepsen, Ph.D. for his outstanding contribution to the study and education of mentally defective children. His wife was presented with a beautiful bouquet of American Beauty roses.

Tuesday afternoon saw the continuation of scientific section meetings, Auxiliary affairs, and the exhibits.

By 6:30 the Vernon Room of Haddon Hall was crowded with members, wives, and guests for the banquet. Delicious food was served by the hotel staff, and dinner was followed by fast-moving speeches and entertainment. Dr. Henry Kessler emcee'd the affair with superb dispatch. His anecdotes about the many places he had visited were fascinating. He managed to limit speeches to a few words, and it can be truthfully said that at no other banquet in history were so few words spoken by so many! Dr. Murray was presented with a plaque by the American Academy of Pediatrics, in honor of his long service to the children of New Jersey. Among those present were Mrs. Murray, his son, Harrold, who gave the invocation, and three other Murray children.

In recognition of 20 years of devoted service, Mrs. Edith L. Madden, Administrative Secretary, was presented with a silver coffee service.

The banquet closed with a concert by the Doctors' Chorus of the Essex County Medical Society, which was well received.

Following the banquet the Mennen Company sponsored a reception in honor of Dr. and Mrs. Murray. Music was provided for dancing by Harold Ferrin and his orchestra.

Wednesday, May 20

The indefatigable scientific sessions continued throughout the final day of the conven-

tion. The Auxiliary, the Board of Trustees, and the section on chest diseases held their final meetings and luncheons. The exhibitors began to pull down their placards, the clerical staff assembled their records, and the rest of us packed our bags and departed. By 4:30 the Meeting was officially over, and we could all look back to an enjoyable, instructive convention, satisfied with the knowledge that much had been accomplished, not the least of which was the renewal of old friendships and the making of new ones.

OFFICIAL ATTENDANCE
187th ANNUAL MEETING
MAY 17-20, 1953

County	Delegates	Members	Total
Atlantic	8	63	71
Bergen	31	32	63
Burlington	4	17	21
Camden	18	43	61
Cape May	3	4	7
Cumberland	5	13	18
Essex	65	161	226
Gloucester	4	10	14
Hudson	24	27	51
Hunterdon	2	1	3
Mercer	21	52	73
Middlesex	14	34	48
Monmouth	10	40	50
Morris	12	23	35
Ocean	3	10	13
Passaic	20	23	43
Salem	3	4	7
Somerset	4	10	14
Sussex	2	1	3
Union	31	40	71
Warren	3	3	6
Fellows, Officers, Trustees, Councilors	20		20
	307	611	918

Physician Guests	50
Physician Scientific Exhibtors	44
TOTAL PHYSICIAN REGISTRATION	1012
Auxiliary Members	339
Visitors	299
Scientific and Educational Exhibitors	47
Technical Exhibitors	186
TOTAL REGISTRATION	1883

SIX YEAR COMPARATIVE REGISTRATION FIGURES

	Physicians	Others	Total
1953	1012	871	1883
1952	1010	785	1795
1951	865	699	1564
1950	1019	851	1870
1949	1073	782	1855
1948	1099	774	1873

SKILLMAN NEURO-PSYCHIATRIC INSTITUTE

Since September 1, 1952 progress has been made in re-organizing the Village for Epileptics at Skillman into the New Jersey Neuro-Psychiatric Institute as a training, research, and treatment center for both psychiatric and neurologic cases.

The first step was the creation of several new positions, among which were a sanitarian, a psychiatric social service worker, a pathologist, and a complete consultant and visiting staff of physicians.

The teaching program has been highlighted by the affiliation of the Institute with Jefferson and University of Pennsylvania Medical Schools, whose students come regularly for teaching sessions. The intramural teaching program has been enlarged by such activities as a journal club, clinical pathologic conferences, seminars, and basic courses in neurology and psychiatry.

The psychiatric treatment program now encompasses fever and electro-convulsive therapy, group therapy, and occupational therapy. In addition facilities are now available for the complete medical evaluation and treatment of any patient.

Besides these measures, an active building program has been undertaken and numerous administrative improvements have been made to establish the Skillman Village as a first-rate institution for the care of neuro-psychiatric patients.

LETTERS TO THE JOURNAL

Dear Editor:

In a recent article entitled "Hiatus Hernia" by Lewis F. Baum, M. D. and Otto S. Baum, M.D. in the March 1953 JOURNAL, there exist, I feel, numerous errors of psychiatric significance.

In a small note serving as prologue to the article the authors speak of the "confusion that may arise in differentiating organic from psychogenic disease . . . "

What do these authors mean by psychogenic disease? Is a gastric ulcer which arises as a result of prolonged emotional tensions a "psychogenic disease" or is it an organic disease? How about mucous colitis, paroxysmal tachycardia, etc.?

In the second paragraph the authors speak of "the emotional factors involved in failure to establish the diagnosis." The immediate impression produced is that these are different from the emotional factors arising when other organic diagnoses are missed. Do they differ, for instance, when a patient has an organic heart disease and is told that he has but a "nervous heart?"

In paragraph two there is outlined one of the most common errors in medicine. The authors state "when routine gall bladder and gastrointestinal x-rays fail to reveal pathology in this group, the physician frequently labels the patient neurotic . . . " If the diagnosis of neurosis is made by the physician because his organic method of attack fails to show pathology, this must leave us with the conclusion that medicine has reached such a state of perfection that any disease which cannot be discovered and diagnosed automatically precludes there being any organicity present, and the implication of medical infallibility is established. We would have to presume then that organic medicine has nothing further to learn and that when the internist or surgeon cannot find a reason for the patient's complaints, the task must devolve upon the psychiatrist. The error in this type of reasoning is so fundamental that it should not require correction, and the error should be obvious to all.

Psychoneuroses have a very definite anatomy, pathology, physiology, and structure; they do not exist "sans corpus;" they are not intended as a waste basket with which the physician may cover up his "organic shortcomings."

The authors then state " . . . This process may take several years during which time true neurotic trends may manifest themselves because of increasing anxiety over the undiagnosed illness." Let us point out that the patients the authors describe are anxious about something which the authors themselves present as real, distressing, uncomfortable — an illness requiring definite medical care.

When a patient becomes "anxious" over illness of that type, I do not feel that it is at all correct to consider that patient as neurotic. Rather, should not anxiety be reserved for those situations where the patient is anxious about something that is unreal, or where anxiety exceeds by far that which would be reasonably anticipated in other individuals in the same situation?

In their summary the authors state "several cases are presented where an accurate diagnosis removed the neurotic label and produced more than anticipated relief of symptoms." In this the authors further carry on the pattern of stigmatization of the psychiatric patient, taking us back to the middle ages when these persons were supposedly possessed of a demon and were to be cast out of respectable society.

In essence, while the article may be a very reasonable presentation of the organic-medical aspects of hiatus hernia, the psychiatric knowledge contained therein will not enrich the reader.

Very truly yours,
DAVID J. FLICKER, M.D.

Dear Editor:

In our article, "Hiatus Hernia," it was our intention to point out that, regrettably but nevertheless actually, it is still rather common practice by many members of our profession to assign patients to the "waste basket" diagnosis of psychoneurosis. In some cases failure to establish an organic diagnosis does form a basis for anxiety which in itself is responsible for subsequent psychosomatic symptoms. Understanding of the purely psychic and emotional origins of the neuroses does not exclude the possibility that diagnostic errors of omission can contribute added symptoms.

COUNTY SOCIETY REPORTS

CAMDEN

Frederick W. Durham, M.D., Reporter

The *Camden County Medical Society* held its last meeting of the season on May 5.

Dr. Martin H. Collier, retiring president, thanked the Trustees, officers, and committees for their support during his year in office. He then spoke to the Society on the value of routine tuberculin testing followed by microfilm x-rays.

Dr. James Eynon, chairman of the nominating committee, recommended the following panel of officers for 1953-54, all of whom were unanimously elected: *President,* Edwin R. Ristine; *President-Elect,* Harold K. Eynon; *Vice-President,* A. Gumersall Pratt; *Secretary,* Frank J. Hughes; *Treasurer,* Robert N. Bowen; *Reporter,* Frederick W. Durham.

On Tuesday, June 9, the annual outing of the society was held at Tavistock Country Club, Haddonfield. A huge turnout enjoyed golf or bridge with handsome prizes for the winners. A testimonial dinner for Dr. Collier climaxed the gala day.

CUMBERLAND

George R. Risi, M. D., Reporter

An interesting and informative lecture on "Differential Diagnosis in Acute Poliomyelitis" was the high spot of the June meeting of the *Cumberland County Medical Society,* which was held at the Onized Cabin of the Owens-Illinois Glass Co. at Palatine Lake on June 2. The speaker was Dr. Lewis L. Coriell, medical director of Municipal Hospital, Camden and Associate Professor of Immunology, University of Pennsylvania. Seventy-three members and six guests attended the meeting with Dr. Kurt M. Hansen presiding.

The guests attending the meeting were: President of The Medical Society of New Jersey, Dr. Henry Decker; the President-Elect, the First and Second Vice-Presidents respectively, Dr. Elton W. Lance, Dr. Vincent P. Butler and Dr. Lewis C. Fritts, and Mr. Richard Nevin, Executive Officer.

The By-Laws of our society, Chapter I, Section I, were changed to permit associate membersbip for physicians who are not members of other societies and who have not practiced in Cumberland County for one year.

The Executive Committee recommended favorable action in the transfer of Dr. Philip H. Hover to the Cumberland Society from Atlantic County Medical Society.

GLOUCESTER

Louis K. Collins, M.D., Reporter

With Don B. Weems, M.D., in the chair, the *Gloucester County Medical Society* met in the clubhouse of the Owens-Illinois Glass Co. at Glassboro, May 21. Several members made a conducted tour of the plant before the meeting.

William W. Pedrick, M.D., local plant physician, introduced Dr. Charles F. Shook, medical director of the Owens-Illinois Glass Co., Toledo, Ohio. Dr. Shook spoke briefly on various problems of industrial medicine, especially those concerning absenteeism and the family physician.

"Office Gynecology" was the scientific subject presented by Robert C. McElroy, M.D., Associate Professor of Gynecology and Obstetrics, University of Pennsylvania Medical School.

The following officers were elected: *President,* Ralph L. Moore; *Vice-President,* John J. Laurusonis; *Secretary,* Dorothy M. Rogers; *Treasurer,* Francis M. Brower; *Historian,* Dorothy M. Rogers; *Reporter,* Louis K. Collins.

HUDSON

John L. Varriano, M.D., Reporter

Dr. Perlberg presided at the regular monthly meeting of *Hudson County Medical Society* which was held at Murdoch Hall, Jersey City Medical Center, on March 3.

Elected to active membership were Ana R. Doran, Joseph A. Guerra, and Anne Jerene Robbins, all of Jersey City.

Speaker of the evening was Mr. Irving Koenig, certified public accountant and former agent for the U. S. Internal Revenue Department, whose topic "I Examined Fifty Doctors," gave highlights of other-than-physical examinations.

Hudson County Medical Society held its regular monthly meeting on April 7, at Murdoch Hall, Jersey City Medical Center, with Dr. Perlberg presiding.

Dr. Donnelly reported the recent incorporation of a new cerebral palsy organization for Hudson County, with headquarters at the A. Harry Moore School for Crippled Children in Jersey City; this organization henceforth will have complete jurisdiction over all cerebral palsy treatment clinics in Hudson County.

The meeting was addressed by Mr. Charles W. Broadhurst, defense attorney of Jersey City, who discussed "Malpractice Claims and How to Avoid Them.'

PASSAIC

David B. Levine, M.D., Reporter

The regular monthly meeting of the *Passaic County Medical Society* was held at the Medical Society Building on April 20. Dr. Joseph M. Keating presided.

The following were elected to membership: Active—Samuel Baum, Passaic; Associate — Donald D. Dingman, Paterson.

Dr. Keating reported on the emergency calls panel, stating that insufficient reply postcards had been received and that another questionnaire for volunteers would be sent to members.

The speaker for the evening, Abner I. Weisman, M.D., Gynecologist and Obstetrician to the Metropolitan Hospital, spoke on recent advances in the treatment of the infertile couple.

WOMAN'S AUXILIARY

INAUGURAL ADDRESS

Mrs. Frank S. Forte, Newark

I am honored to have been selected to represent the Auxiliary as its 27th President and am aware of the responsibilities and duties that the office entails. I shall humbly attempt to encourage and stimulate its continued growth.

This year I would like to stress the importance of every member becoming a subscriber to the AMA Bulletin; it is full of worthwhile information which I am sure will be an aid from the county level up.

Secondly, it would be beneficial to officers, chairmen and members alike to become acquainted with the Handbook of the AMA Auxiliary; you will find it helpful in setting up your programs and reports, it will aid in having your Auxiliary meetings run smoothly.

We have a new committee in the state auxiliary this year—The American Medical Education Foundation. This is a new venture which is very worthwhile; medical schools have not escaped the economic problems which beset us. They are currently operating at a loss; this is a serious threat to the future of American medicine. Material which will enlighten and stimulate interested participation in this program will be made available by our state chairman.

Membership in the Woman's Auxiliary is unique; no one will deny the vital force that the Woman's Auxiliary constitutes in organized medicine and yet one is appalled by the paucity of members as contrasted to the membership of The Medical Society of New Jersey, which totals more thas 5000. It should be our aim to strive for a corresponding membership in the Auxiliary. Ways and means must be found whereby every practicing physician who is a member of the Medical Society is represented by a wife, mother, unmarried daughters or sisters.

The function of the Public Relations Committee of the Woman's Auxiliary is to integrate the various county auxiliaries in an overall program, designed to present the efforts of the Medical Society in fostering better relationships in problems of mutual interest to the profession and the public.

Program material furnished to the Auxiliary should maintain the interest of its members and make them aware of the purpose and ideals of the Auxiliary. Its purpose is to enable them to serve as leaders of health education in their local communities. "Better programs produce better members."

Our usual programs such as care of the chronically ill, cancer, nurse recruitment, *Today's Health*, civil defense, legislation, etc., will continue their usual high level of efficiency.

We, as wives of physicians, are organized to aid the Medical Society; let us strengthen the force that makes us work well together. We need not function alike but we must function harmoniously.

AUXILIARY REPORTS

Atlantic County

Mrs. Harry P. Goodman, Chairman, Press and Publicity

The annual luncheon of the *Woman's Auxiliary to the Atlantic County Medical Society* was held May 8 at the Traymore Hotel. Forty-five women gathered to honor Mrs. F. Rolfe Westney, the outgoing president.

The following were elected to office: *President,* Mrs. E. Harrison Nickman; *President-Elect,* Mrs. Max Gross; *First Vice-President,* Mrs. Irving Shavelson; *Second Vice-President,* Mrs. Jay E. Mishler; *Treasurer,* Mrs. Samuel Kaman; *Recording Secretary,* Mrs. Samuel Diskan; *Corresponding Secretary,* Mrs. J. Neafie Richardson.

Mrs. Samuel Diskan, chairman of nurse's scholarship, presented two young ladies who were awarded a three-year scholarship by the Auxilary to the Atlantic City Hospital School of Nursing.

Essex County

Mrs. Louis L. Covino, Chairman, Press & Publicity

The *Woman's Auxiliary to the Essex County Medical Society* held its April meeting at the Con-

temporary Lounge, Newark, on the 24th. Mrs. Jerome Kaufman presided.

Mrs. Jesse Glazier, chairman of nurse scholarship, announced that candidates had been selected for the scholarships this year. Total number of scholarships given by our Auxiliary stands at eleven.

The annual election of officers was held, and Mrs. Stuart Z. Hawkes was elected President. Other officers elected were: *First Vice-President,* Mrs. Ralph Autorino; *Second Vice-President,* Mrs. Harry DiGiacomo; *Recording Secretary,* Mrs. George Parcell; *Treasurer,* Mrs. Paul Aszody; *Secretary to Treasurer,* Mrs. Don A. Epler.

Hudson County

Mrs. Moses Dolganos, Chairman, Press & Publicity

The *Woman's Auxiliary to the Hudson County Medical Society* held its last regular meeting of the season on May 4, in Murdoch Hall, Jersey City Medical Center.

The following officers were elected: *President,* Mrs. William Loori; *President-Elect,* Mrs. Moses Dolganos; *Vice-Presidents,* Mrs. James Murphy and Mrs. Paul Miranti; *Recording Secretary,* Mrs. James Tsucalas; *Corresponding Secretary,* Mrs. Fred Sachs; *Treasurer,* Mrs. Harry Perlberg.

Miss Mary Frances Dillan entertained the group by giving a number of amusing monologues.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Forensic Psychiatry. By Henry A. Davidson, M.D. New York 1952. The Ronald Press Co. Pp. 398 with glossaries and examination guides. Index. ($8.00)

Any physician, whether psychiatrist or not, will find this volume a practical guide through the jungles of court-room medicine. One section of this book, aptly entitled "The Tactics of Testimony," gives down-to-earth tips on preparation for court appearance, handling of examination and cross-examination by the attorney and court room etiquette. The volume is useful to both physician and attorney, since it shows each something of the problems of the other. The book includes a series of handy guides on medico-legal examinations which is, in some ways, unique. I consider the material on preparation for court a "must" for any doctor who, whether voluntarily or in response to subpoena, must take the witness stand.

Dr. Davidson's scintillating style is, of course, well known to the readers of this JOURNAL, since the author was, for more than a decade, its editor. The book, written in that readable style, reflects Dr. Davidson's mastery of forensic medicine—not just forensic psychiatry. One pertinent subject follows another: criminal responsibility, personal injury evaluation, divorce, contracts, commitment, guardianship, malpractice, juvenile delinquency, alcoholism, sex offenses, wills, competency and many others. The author has incorporated both medical and legal references and has provided an unusual combination of reference work, textbook, and handy guide.

This work makes New Jersey doctors proud that Dr. Davidson was one of our own men, living and practicing here so long. While the procedural details are by no means limited to our state—he touches on procedures in all states—the author's baptism in forensic medicine was accomplished largely in the courts of New Jersey.

DAVID J. FLICKER, M.D.

Biochemistry of Disease. By M. Bodansky and O Bodansky. 2nd ed. by Oscar Bodansky, M.D., Ph.D. Professor of Biochemistry, Sloan-Kettering Division, Cornell University Medical College. Pp. 1208. New York, The Macmillan Company, 1952. ($12.00)

Having read, outlined and almost having memorized the first edition of this book, I found myself in an excellent vantage point to review the second edition of *Biochemistry of Disease.* The 14 years which have elapsed since the first edition have been an era of great advance in medicine and biochemistry. Oscar Bodansky (the senior author of the first edition, M. Bodansky, died in 1941) has captured this change and has recorded it well in a textbook which is much broader and more comprehensive than the first. The book is well-organized and well-written in a style which is easy to read. Illustrations, while not profuse, are selective.

The chapter on heart disease covering advances in the pathogenesis of atherosclerosis and congenital heart disease is noteworthy as is the section on renal function and electrolyte balance in congestive heart failure. That portion of the text dealing with the kidney and kidney function is significant because of its simplicity in the explanation of the principles of clearance. Discussion of intestinal diseases brings one up-to-date on such phases as lysozymes in ulcerative colitis and potassium metabolism in diarrhea. Great strides have been made in this book as compared with the first edition, especially in the discussion of endocrinology. An interesting and important part of the text is the inclusion of an appendix with mean normal values with standard deviations of various biochemical figures for blood, feces, urine, et cetera.

In general the book is saturated with information and in these days of "multiple-authored" texts, I was amazed how one man could read, digest, compile and write so much so well. The bibliography is exhaustive and serves as a wonderful reference for those interested in reading the original work which could not be quoted in greater detail.

The paper and type make for easy reading. Proofreading has left few errors but on page 392 a whole line of type is upside-down.

Biochemistry of Disease is virtually a textbook of medicine with a biochemical flavor and as such should be a welcome treat for the internist, postgraduate student and the general physician. It might well serve as a bible for those studying for specialty board examinations.

MARVIN C. BECKER, M.D.

The Conception of Disease. By Walter Riese, M.D. New York, Philosophical Library, 1953. Pp. 120. ($3.75)

From time to time it is worthwhile to consider the philosophic aspects of medicine. This short monograph will serve as an excellent source book for anyone so inclined. Dr. Riese states in his preface that the various concepts of disease exist side by side in different periods of history; the particular concept prevailing at any one time is chiefly due to circumstances of history or the influence of an outstanding figure in medicine.

In this book the major concepts of disease that have influenced medical thinking are described and discussed. The stoic concept (Seneca), Hippocrates' concepts, and the moral theory are discussed first; subsequent trends of thought are followed up to later concepts based on ontology, nosography, anatomy (Vesalius, Morgagni, and Virchow), etiology, psychology, etc. A final epilogue by the author brings all these concepts together and summarizes them in light of today's ideas.

For physicians interested in the less practical aspects of medical science, this book will provide material for reflection. Unfortunately, its style is not the most lucid, but there is plenty of meat if one reads carefully.

R. D. GOODMAN, M.D.

A Manual of Clinical Allergy. By John M. Sheldon, M.D., Robert G. Lovell, M.D., and Kenneth P. Mathews, M.D. Phila., W. B. Saunders Company, 1953. ($8.50)

This handy manual on allergy contains much valuable information for office practice. Controversial theories are left out and many practical points are discussed. For example, did you know that a mold-sensitive patient may be allergic to vitamin B preparation made from yeast? Did you know that a high incidence of nasal polyps occurs in aspirin-sensitive individuals?

On page 110 are listed the antihistamines by groups, based on their similarity of action. This will cut down a great deal of useless prescribing. If your patient does not benefit from one product from each of the three or four main groups, he probably will not be helped by the two dozen others on the market.

There are excellent directions for the prevention of allergies in children on page 172, as well as directions for preventing dust over-exposure on page 316.

One criticism, however, is that the authors devote only three pages to discussion of the psychologic aspects of allergy. Even though the book is a manual, I believe the space devoted to this subject should be enlarged. However, the book is strongly recommended for anyone who does allergy in his practice.

FRANK L. ROSEN, M.D.

Progress in Ophthalmology and Otolaryngology: a Quadrennial Review. Vol. I: Part 1, Ophthalmology, ed. by Meyer Wiener, M.D. and A. Edward Maumenee, M.D.; Part 2, Otolaryngology. ed. by Percy E. Ireland, M.D. and Joseph A. Sullivan, M.B. Pp. 666. New York, Grune & Stratton, 1952. ($15.00)

The intent of this volume is to stimulate the interest of ophthalmologists and otolaryngologists in a group of subjects that offer, according to the editors, something new. It is neither a textbook nor a yearbook, but stands somewhere in between, with the 72 contributors evaluating a variety of subjects that the editors believe to be of topical interest. The literature from July 1946 to July 1952 is covered in this first volume and there is much in both sections to appeal to the discriminating reader in these fields.

As an otolaryngologist, this reviewer will assay critically only the material found in Part 2.

In recent years the specialty (otolaryngology) has been trying to rediscover its niche in medicine. The use of antibiotics has limited operative surgery which formerly was resorted to in combating infection. Other facets of the specialty now are engaging the attention of the profession and Part 2 of this volume deals with the recent progress in present day problems. About half of the material deals with otology and the problems of hearing. Physiology, testing, diagnosis, medical and surgical treatment receive able coverage. Hoople's chapter on otitis media with effusion stresses the frequent occurrence of this condition and the necessity for myringotomy, both in diagnosis and treatment. Sullivan's discussion of surgery of the facial nerve is interesting and provocative, particularly his use of early decompression in Bell's palsy. Aural rehabilitation is covered somewhat sketchily, but a program which may be carried out by the individual practitioner is suggested.

Nasal physiology and pathology are well reviewed. The chapter on maxillary sinusitis by Harkness should be particularly helpful to the practicing rhinologist because many practical points are considered. He advocates the free use of inframeatal antral windows. Malignant lesions of the head and neck, and in particular of the sinuses, larynx and pharynx, are dealt with extensively from the standpoint of diagnosis and treatment. Surgical technics used by the authors are described very completely but illustrative material is somewhat inadequate. The concise but complete review of allergy by Hansel is worth reading thoroughly.

MYRON J. SHAPIRO, M.D.

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI July, 1953 No. 7

COMMUNITY-WIDE CHEST X-RAY SURVEY

Public Health Service, Publication No. 222 Federal Security Agency—Foreword by James E. Perkins, M.D.

Tuberculosis control rests primarily on the prevention of the spread of infection. With the elimination of milk-borne infections, this boils down to finding every human source of infection—that is, every patient with active disease—as soon as possible, so that supervision and care, the means of preventing further infection and of rendering the patient noninfectious, can be provided at the earliest possible moment. Until we have an effective antituberculosis vaccine comparable to smallpox vaccine or diphtheria toxoid, this will continue to be the principal basis for the tuberculosis control program.

This in no way belittles the importance of social and economic factors in the reduction of tuberculosis morbidity and mortality. Although the tuberculosis worker realizes that such factors have been of major importance in the reductions effected to date—and perhaps, even of greater importance than the specific attack upon tuberculosis itself—he faces realistically the fact that improvements in standards of living are dependent upon many diverse factors, which he personally can affect only to a minor degree. Although he supports programs which may improve standards of living, he believes that short cuts can be taken to the goal of tuberculosis eradication by specific anti-infection measures. He realizes that no case of tuberculosis ever occurs in the absence of the tubercle bacillus. He is aware of examples of other communicable diseases whose prevalence was precipitously reduced through the application of specific control measures, without any concurrent, significant change in social and economic conditions. Multiple causation of tuberculosis is real—but the other causes do not count if the tubercle bacillus is eliminated. The practical approach to the control of tuberculosis, then, is to find infectious cases as soon as possible after they have become infectious.

The value of finding cases is directly related to personnel and facilities available for adequate supervision and proper hospital treatment. Ideally, therefore, before conducting a case-finding program, one should estimate the number of cases which exist in the community and arrange for adequate facilities for their care and supervision. However, human nature being what it is, and with the demands for public funds often exceeding available amounts, it is frequently necessary to reverse this process and find the cases first. When this is done, a community's authorities may be approached with a specific, concrete problem needing immediate solution, rather than an estimate of a problem for which facilities should be provided. We can get higher percentage yields of active cases of tuberculosis by seeking these cases in certain, special segments of the population, such as the household contacts of known cases and patients admitted to general hospitals. Such segmental case-finding programs are essential but the difficulty is that if case-finding activities were confined solely to such groups, we should still miss the majority of active cases in a community. This is especially true in the large cities, where infections are likely to occur from sources which cannot be traced by the usual epidemiological investigations.

About five years ago, it became clear that the community-wide approach to tuberculosis case finding was the indicated method. The difficulties

and expense of community-wide surveys were not underestimated, but these were not regarded as insurmountable obstacles. Moreover, the promise which the community-wide chest X-ray survey held for effective tuberculosis control would more than justify the efforts needed to launch the program.

It was obvious that community-wide chest X-ray surveys could be conducted most effectively and efficiently in the large cities, the very places which were most in need of such case-finding programs, and where local case-finding facilities were often not adequate for completing such programs in a reasonable period of time. Since the large cities have the highest tuberculosis death rates and well organized medical and public health facilities, including hospitals, clinics, and official and voluntary health organizations, they were the most logical places to initiate these mass screening programs.

The time element is very important in community-wide chest X-ray surveys. If the survey is conducted at such a slow tempo that only a fraction of infectious cases are discovered in a given year, little or no dent is made in the amount of infection in the community. Finding 10 per cent of the cases per year over a nine year period, for example, is not nearly as effective as finding 90 per cent of the cases in one year.

It would be ideal to have every person receive an annual chest X-ray through local facilities as part of a general physical examination, preferably with the physcial examination performed by the family physician. However, this is only an ideal at the present time, and the community-wide chest X-ray survey offers a practical way of bridging the gap until we can reach this goal. An undertaking like the community-wide chest X-ray survey is bound to result in temporary adjustments and changes in normal community health services, and these, in turn, can make for problems and difficulties. Experience, however, has shown how to minimize these problems and difficulties and also that such temporary dislocations of a community's health services are not without benefit. First, before a chest X-ray survey is begun, the official and voluntary health agencies of a community must go through some new thinking in the evaluation of their tuberculosis control program. Second, other community groups and civic leaders are brought actively into the program of tuberculosis control, often for the first time. Third, the survey helps to make almost every citizen of a community aware of the tuberculosis problem, and to realize that he can help solve it. And finally, the mass case-finding program stimulates a community's civic leadership toward providing facilities for the diagnosis and treatment of tuberculosis more rapidly than they otherwise would.

There are still many questions to be answered with regard to community-wide chest X-ray surveys. Some of these are: (1) How often should surveys be repeated? (2) At what low point of tuberculosis prevalence in a community will the yield of new cases be so low as to make the expense of community-wide chest X-ray surveys exorbitant? (3) To what extent can and should community-wide chest X-ray surveys be combined with screening programs for other conditions? The existence of these questions does not justify altering the program for the present. Surveys conducted thus far have indicated that they are practical procedures, that they yield worthwhile results, and that they must be continued for some time to come.

Since tuberculosis is a communicable and therefore unnecessary disease, the community-wide chest X-ray survey deserves the full support of the medical profession, the official health agency, and the voluntary health association. The action of the Public Health Service in making personnel and facilities available to large cities through their state health departments for these surveys was a bold and courageous step which is paying large dividends for tuberculosis control.

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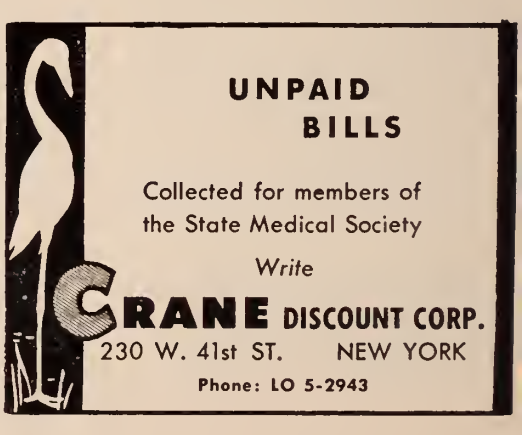
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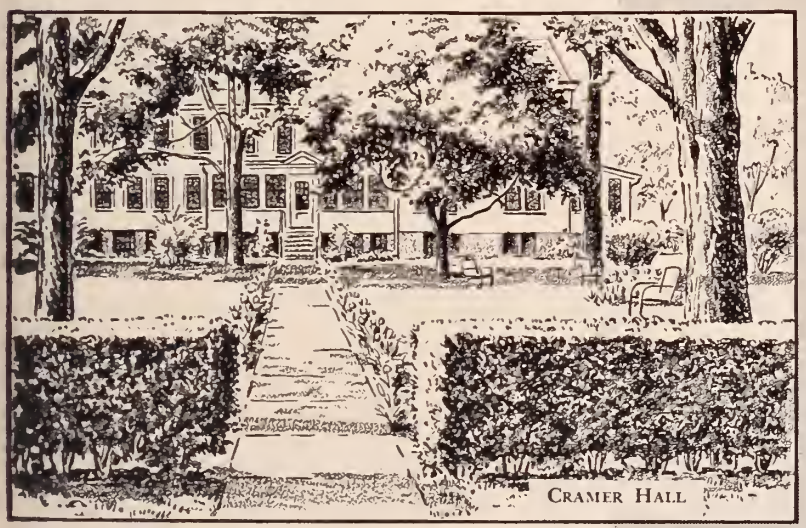
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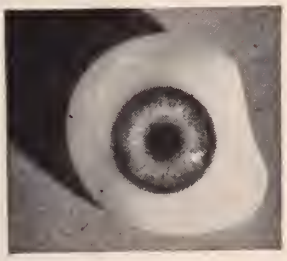
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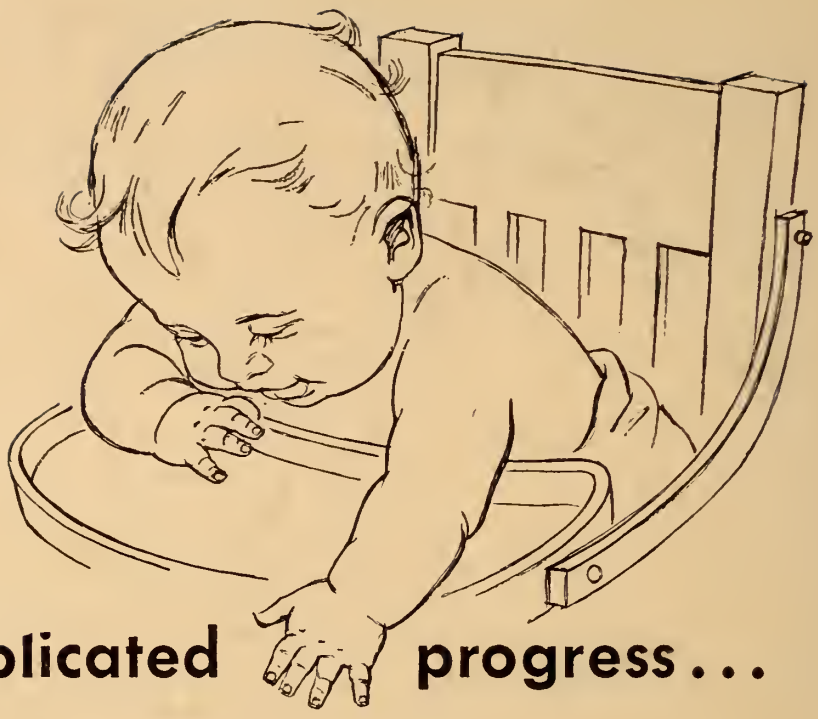
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CONTENTS—Pages 325 to 362

OF MEDICINE
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EDITORIALS— Page

THE COST OF HOSPITAL CARE 325

HEAT THERAPY 326

THE NEXT CASE WILL BE PRESENTED BY 327

ORIGINAL ARTICLES—

ADVANCES IN THE TREATMENT OF GOUT—Peter J. Warter, M.D., Trenton, N. J. 328

BUTAZOLIDIN IN THE TREATMENT OF ARTHRITIS—John A. Strazza, Jr., M.D., Bloomfield, N. J. and Michael Ressetar, M.D., Passaic, N. J. 333

PERFORATED GASTRIC ULCER DURING CORTISONE THERAPY FOR RHEUMATOID ARTHRITIS—Richard Kerdasha, M.D., Vineland, N. J. 343

THE CHLORIDE TEST IN DROWNINGS AND DEATH DUE TO OTHER CAUSES—George F. Kamen, M.D., Westfield, N. J. 346

ORIGINAL ARTICLES— Page

PREVENTION OF ATHLETIC INJURIES IN HIGH SCHOOL—Max M. Novich, M.D., Newark, N.J. 350

STATE ACTIVITIES—

Edward J. III Award to Dr. Henry B. Orton 355

Mobile Physiotherapy Unit 355

World Medical Association Meeting 356

OBITUARIES 356

ANNOUNCEMENTS 357

COUNTY SOCIETY REPORTS 358

WOMAN'S AUXILIARY 359

BOOK REVIEWS 360

TUBERCULOSIS ABSTRACTS 361

Roster of Officers, Advertising page 3A

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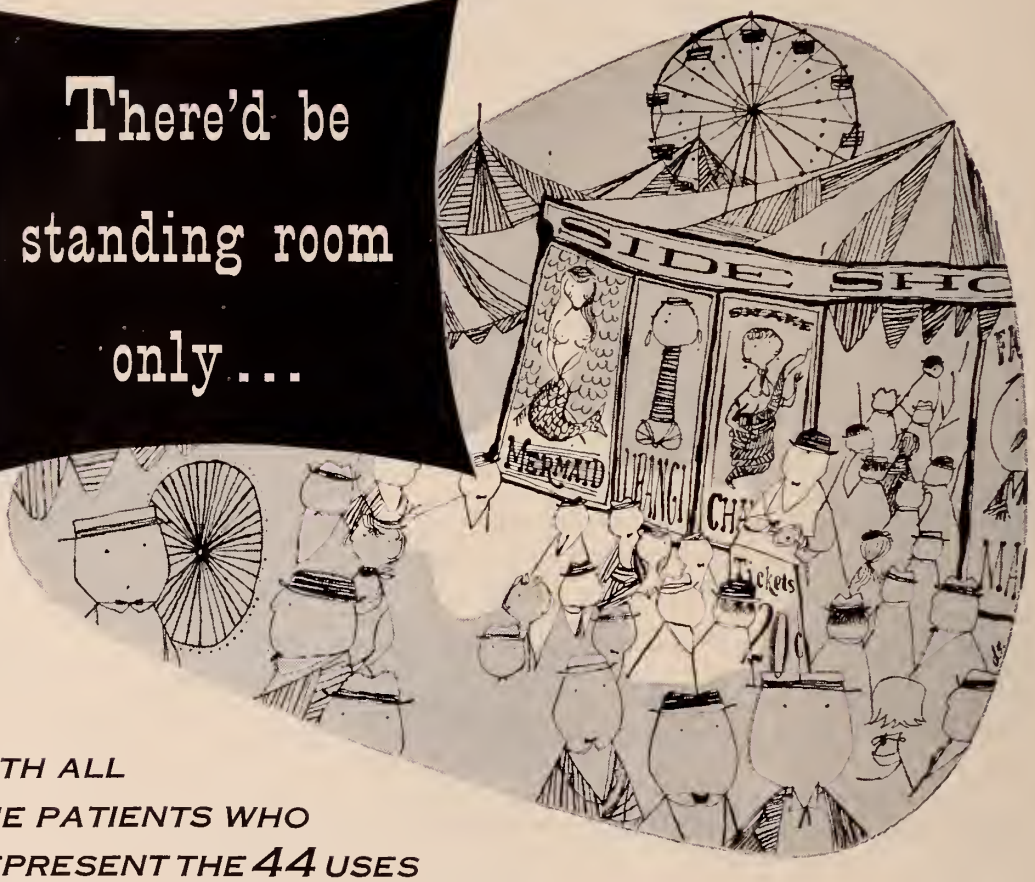
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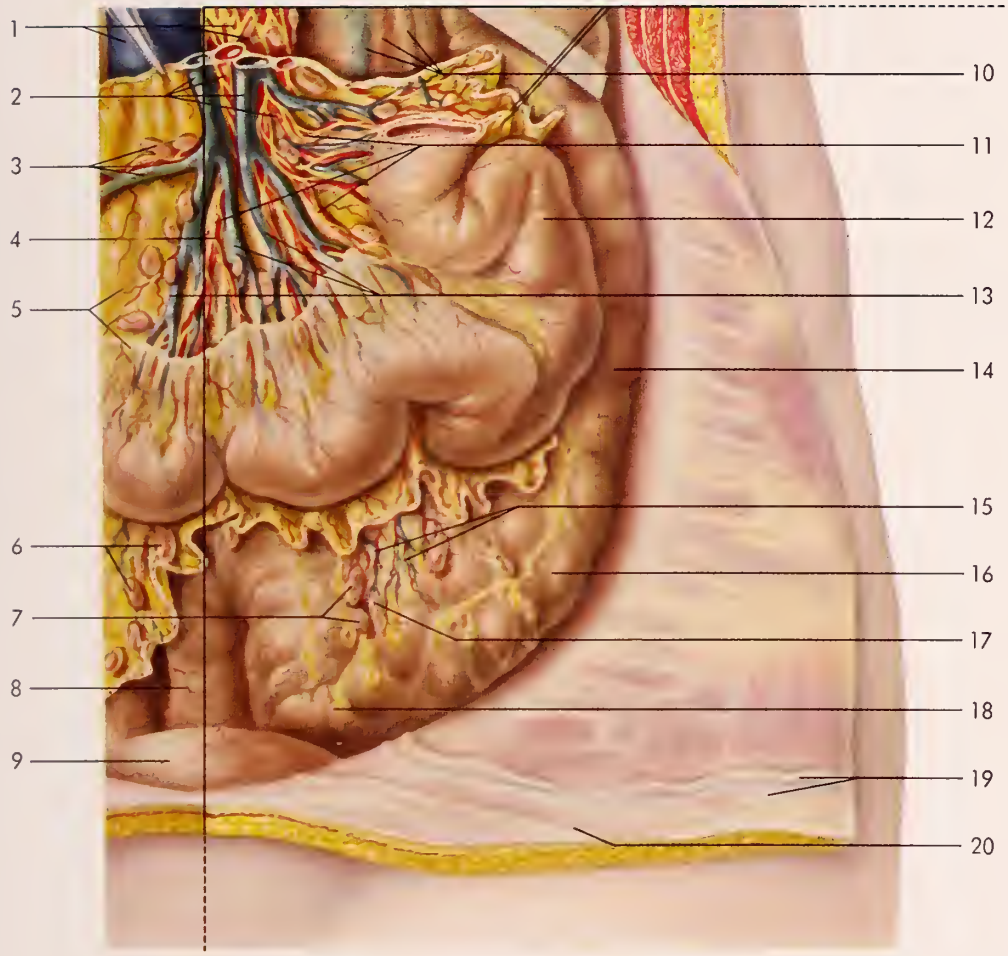


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1 Vena cava, aorta and abdominal aortic plexus

2 Branches of superior mesenteric artery and vein

3 Ileocolic lymph node and ileocolic artery and vein

4 Sympathetic abdominal plexus

5 Mesentery

6 Mesenteric lymph nodes

7 Mesocolic lymph nodes

8 Rectum

9 Urinary bladder

10 Inferior mesenteric vein, left colic artery and ureter

11 Intestinal arteries

12 Ileum

13 Intestinal veins

14 Descending colon

15 Branches of sigmoid artery and vein

16 Iliac colon

17 Mesocolon

18 Sigmoid colon

19 Epigastric artery and vein

20 Lateral umbilical ligament

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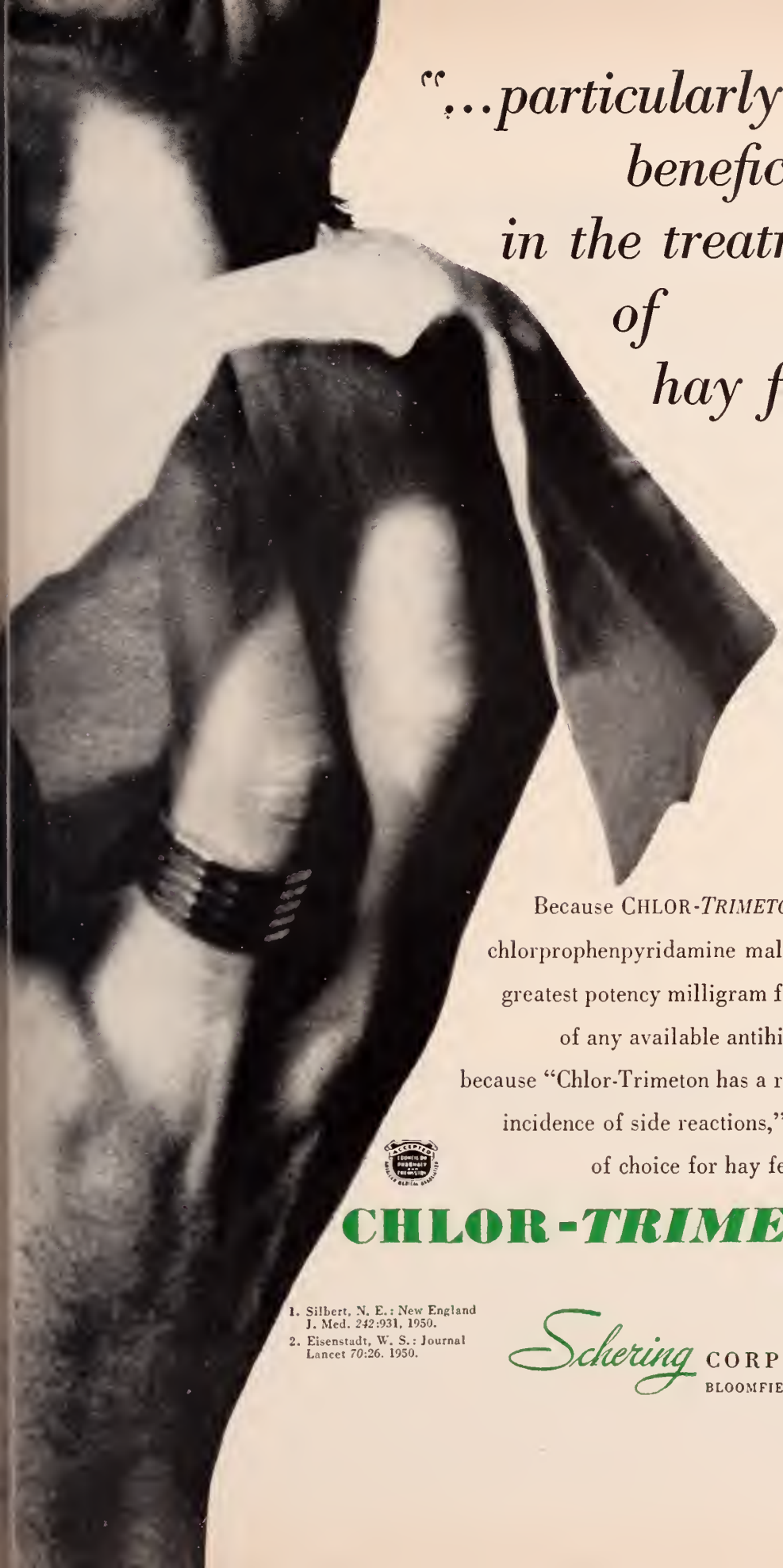
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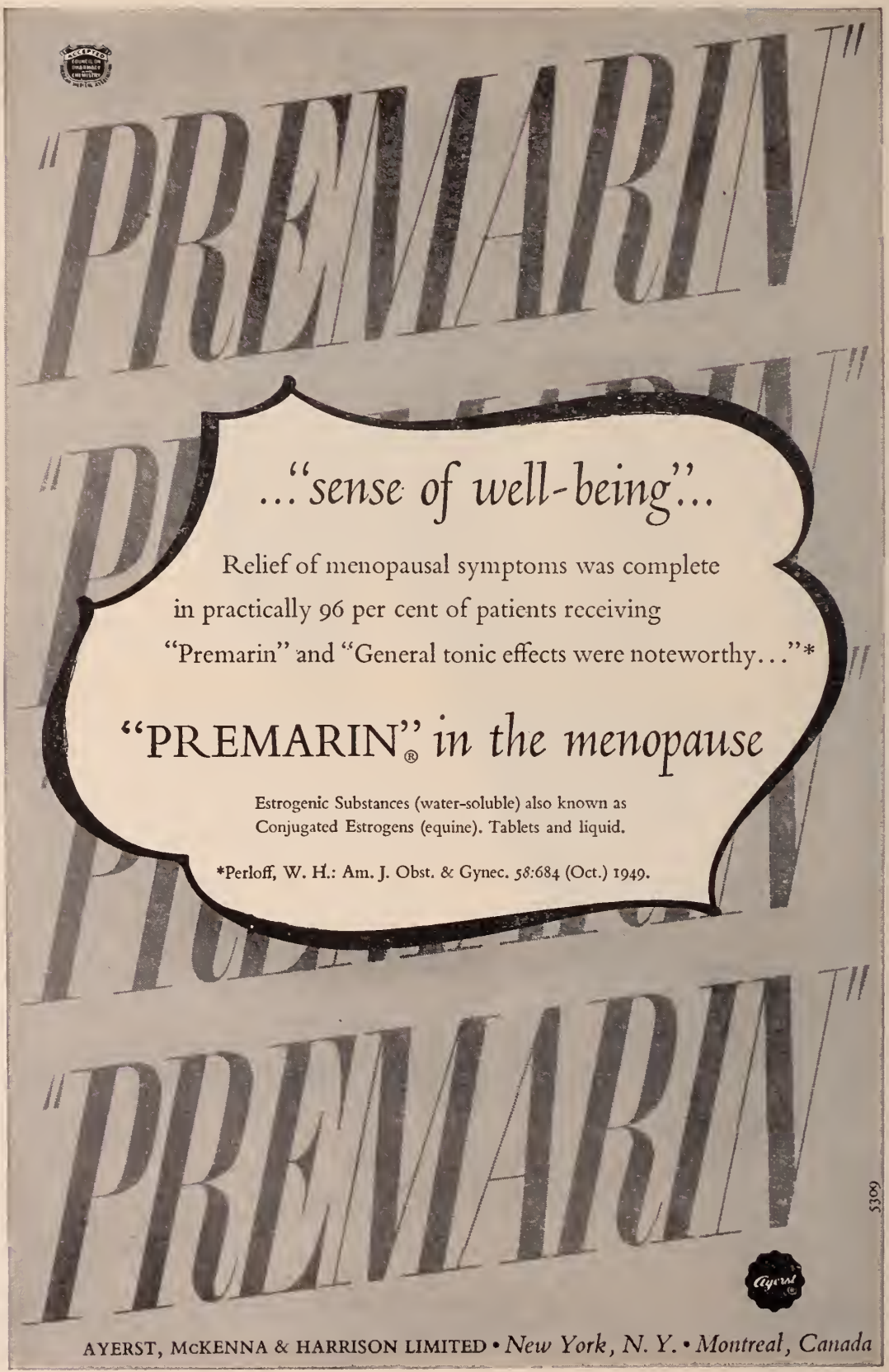
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2. Eisenstadt, W. S.: Journal Lancet 70:26. 1950.

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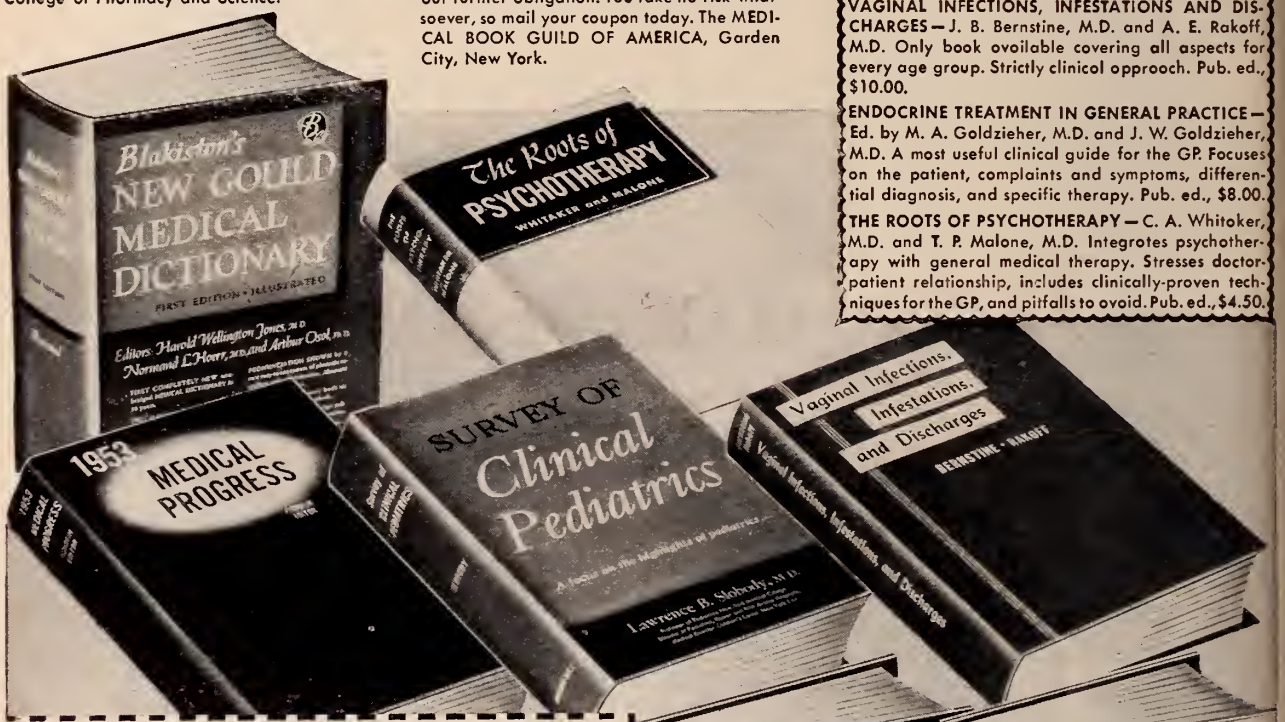
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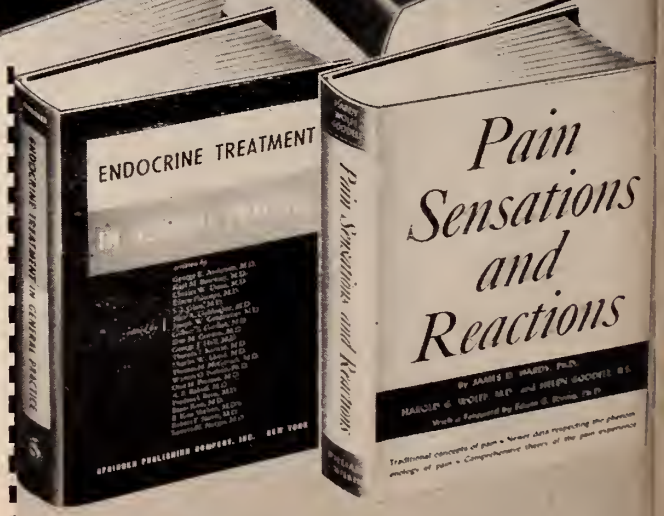
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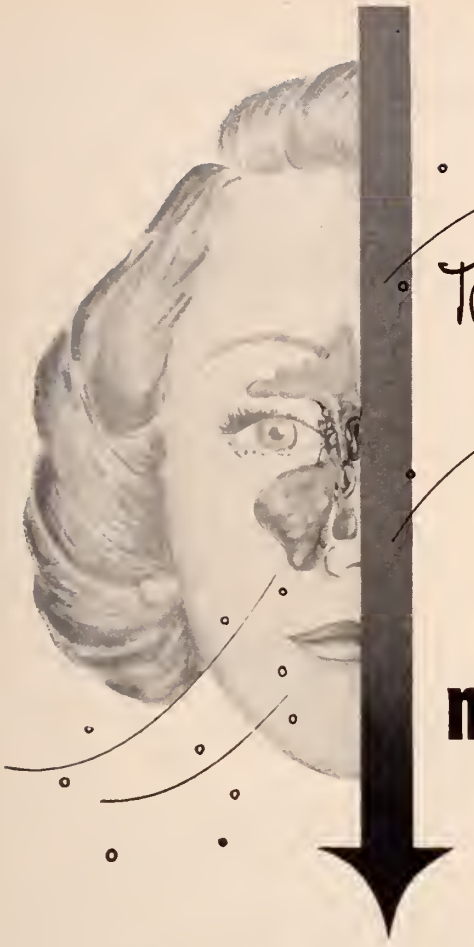
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1. Von Alyea, O. E., and Donnelly, Allen: *Arch. Otolaryng.*, 49:234, Feb., 1949.

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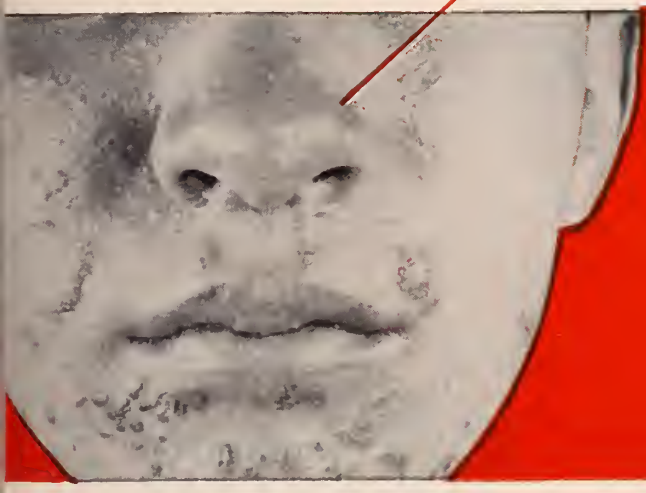
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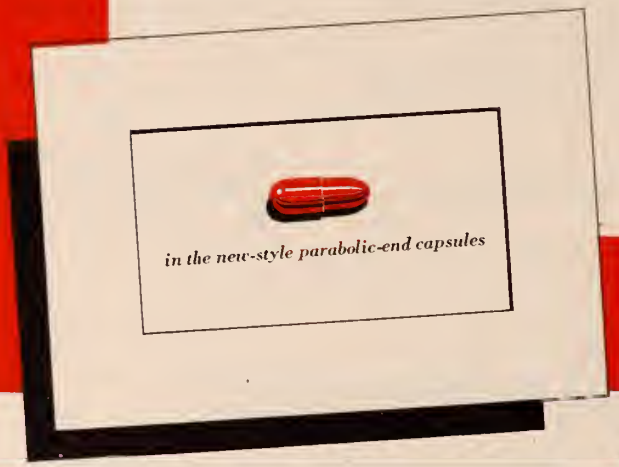
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THE COST OF HOSPITAL CARE

Every physician who cares for hospitalized patients is acutely aware of the current high cost of hospitalization. Even short-term periods of hospital stay place a heavy burden on the average budget. Prepaid hospitalization insurance helps many families meet this burden, but a hospital bill still poses a major financial problem for numbers of uninsured patients, especially those living on fixed incomes, pensions or annuities. Yet, hospitals themselves are not profit-making enterprises, and virtually all of them show an annual deficit, for which outside contributions must be sought.

The American Hospital Association is fully aware of this pressing problem, and has sponsored a nation-wide study to be carried out by the Commission on Financing of Hospital Care. This commission, subsidized by grants from the Blue Cross Commission, Health Information Foundation, John Hancock Mutual Life Insurance Company, W. K. Kellogg Foundation, Milbank Memorial Fund, National Foundation for Infantile Paralysis, and the Rockefeller Foundation, has outlined its program in its first progress report.

Utilizing regional conference and questionnaire methods, this commission is investigating three major aspects of hospital financing: prepayment plans, appraisal of hospital costs, and financing hospital care for non-wage and low income groups. Each of these topics has been assigned for intensive study to its separate committee.

At the present, the commission is still in the stage of assembling and correlating data. Its final report should be a valuable contribution to the solution of this major problem of present day medicine, the distribution of scientific advances to the general public at minimal cost.

HEAT THERAPY*

Among the oldest and most widely used forms of treatment, both professional and amateur, is the local application of heat. Yet most laymen, and undoubtedly many physicians, have but a poor understanding of the physiology of locally applied heat. As with most other forms of treatment, a thorough knowledge of the limitations and dangers of heat treatment is essential if serious harm is to be avoided.

Heat applied locally to an area of the body surface causes an increased blood flow due to vasodilatation. This in turn produces a rise in capillary pressure and an increased rate of transfer of fluid from the blood to the tissues, accelerated local metabolism, and an increase in phagocytosis. The maximum rise in temperature is at the site of contact with local heat. By virtue of conduction, deeper structures also show a significant temperature rise.

Local heat has long been used for the relief of pain, especially pain of neuromuscular origin and from arthritic conditions. Pain in acute poliomyelitis is relieved by heat packs. Heat is also useful in treating chronic arthritis; for this purpose baking, hot compresses, whirlpool baths and paraffin packs locally are of greater value than diathermy or the microtherm. Diathermic energy increases discomfort, and should not be used on acutely inflamed joints. Contrast baths have given encouraging results in chronic osteoarthritis, particularly of the hands or feet.

When using heat therapeutically, definite precautions should be observed. First, extreme care must be taken to avoid burning the patient. Burns from electric currents are especially serious because they cause considerable loss of tissue, heal slowly, and leave disfiguring scars. Intense forms of heat should be used sparingly in young children, in old people, with patients who are debilitated, and with those suffering from diabetes, generalized arteriosclerosis, heart disease or nephritis. Heat should never be used over areas of hemorrhage, or in patients with hemorrhagic disease.

In older persons, a careful survey of sensory responses must be made before heat is applied. If there is any sensory impairment, heat should be avoided, if possible.

The use of short wave diathermy requires extra attention and caution. Here the greatest danger is from burning by the electrodes or cables. There should be no clothing between the electrode and the skin—only the spacing material. All metallic objects must be removed from the region of treatment. Chairs, tables and beds upon which patients are placed should also be free of metal parts. If the patient complains of pain or burning, treatment should be stopped at once. Diathermy should not be self-administered by patients.

Diathermy is contraindicated in all acute processes in which there is fever, suppuration, edema or acute local inflammation. It also increases the pain and disability of early trauma, sprains, fractures, acute bursitis, and arthritis. Diathermy is contraindicated in the presence of hemorrhage, even profuse menstruation, and should not be applied over the low back in pregnancy. It is also ill advised in cancer.

Disastrous results may occur if any form of heat is applied locally to extremities in which there is impaired circulation. If arterial flow to a part is diminished the use of even mild local heat produces an increased metabolic demand, which calls for more oxygen than can be met through the inadequate blood supply. This creates a relative ischemia, with pain, edema, ulceration, and even gangrene. Local heat is likewise dangerous in venous obstruction, for here the dis-

* Piersol, G. M.: Therapeutic Application of Heat: Its Uses and Abuses. New England J. Med., Sept. 4, 1952.

sipation of heat via the venous return is interfered with, and the local temperature may rise to the point of edema or ulceration.

Failure to appreciate the physiology of heat therapy may lead to disappointing results and precipitate disastrous and unforeseen complications.

THE NEXT CASE WILL BE PRESENTED BY

How often have you waited nervously for the chairman of your hospital staff meeting to say these words while you shuffle your notes in preparation for your "big moment"? More often, perhaps, you have suffered silently during a meeting while one of your colleagues has droned through a long case report and an ineptly presented discussion. Public speaking is an art, and any physician who may be called on to speak should have at least a nodding acquaintance with it. The rudiments of this art, applicable to large or small audiences, are outlined in an editorial [1] in the September 1952 *Annals of Internal Medicine*.

First, give thought to the time limit. Allow twenty seconds for your introduction by the chairman, remember that you speak more slowly in public or before a microphone than in ordinary conversation, and allow plenty of time for blackboard demonstrations, showing of x-rays, or lantern slide presentation. It is far better to be three minutes short of the time allotted to you, than to run three minutes over.

If you are to use a microphone, place it slightly below the level of your mouth, keep your speaking pitch up, especially at the end of sentences, and maintain a distance of seven to ten inches between your mouth and the microphone. This distance is roughly a hand's span from the chin.

If you are using lantern slides, allow one minute for each slide. The material should be well centered, both horizontally and vertically, so that the top, bottom, or sides will not be cut off when projected on the screen. If pictures or photomicrographs are used, important points should be marked in advance by a circle or arrow, so that you will not have to turn your back on the audience, or microphone. If you are using an electric torch or arrow pointer, become familiar with it before the meeting, and after it has served its purpose, turn it off, or point it at your feet—never shine it in the faces in the first row.

If the slide contains a diagram, make it simple, and visible; if data, keep them minimal, and in large, legible type or lettering. Remember, the man in the last row has as much right as the rest of the audience to see the slides.

In brief, whether you are addressing an audience of five or five hundred, remain within your allotted time, speak clearly and slowly, drive home a few important points, and make your illustrative material clear. Your talk will be more like caffeine than barbiturate in its effect.

1. Kern, R. A.: Editorial—How to Present a Scientific Paper Before a Large Audience. Ann. Int. Med. 37:618 (September, 1952).

ORIGINAL ARTICLES

ADVANCES IN THE TREATMENT OF GOUT†

Peter J. Warter, M.D.,* Trenton, N. J.

Gout is an important, often unrecognized, metabolic disturbance producing crippling disability. In this review, newer drugs are critically appraised and dietary management is given secondary importance.

Descriptions of acute gout written in the early eighteen hundreds gave a classic picture which remains impressive today. Though over a hundred years have elapsed, the art of medicine was at its height in Scudamore's [1] treatise. In spite of the lack of scientific facilities known today, those early observers showed an acumen which has not been equalled until this decade.

Many of the postulates set forth in the early centuries have been adhered to by most observers until today; the etiology of gout remains unknown.

The hereditary aspect has stood the test of time. The investigations of Talbot,[2] corroborated by Smyth and Freyburg, [3,3a] have definitely established gout as a hereditary disease. These studies have established the transmission of hyperuricemia as a Mendelian dominant.

Dietary factors were associated with the cause of gout before the eighteenth century,[1] and many lists of foods and liquors which were felt to cause gout have appeared in the literature since that time. More recently, many have believed that alcohol and foods high in purine are etiologic factors, or precipitants of gout. Bauer [4] and Hench [5] have urged caution in accepting this theory. Notwithstanding, many observers have continued to indict alcohol and purine as a major factor in inciting the disease and have promoted the prophylactic value of diet.[6,7]

In the very near future the outstanding work of Maguire, Smith and Strickland [8] will be published. I believe they have established that restricted intake of alcohol and purines is no longer necessary. This revolutionary report opens new channels of investigation and gives hope for the possible dissolution of gout.

The aberrant forms of gout recognized in the early literature [1] have developed into a definite pattern. The association of systemic symptoms with hereditary gout has been established unequivocally. That a hyperuricemic individual may never suffer from joint distress; that the diagnosis of gout in an individual may not be known; that one may die from the cardiovascular or renal impairment produced by gout, are facts.[7]

In the late seventeen hundreds gout was a term erroneously used for all rheumatic conditions. In 1776, Scheele and Bergman discovered uric acid. In 1797, Wollaston described tophi. These two findings added greatly to Sydenham's (1624-1689) classic differentiation between gout and rheumatoid arthritis. Garrod in 1848 found that gouty patients had increased uric acid in the blood.

A few years ago Hench [16] grouped significant symptoms and findings which should cause one to be suspicious of gout. They are spoken of as the "axioms of Hench." This grouping, found in detail in the recorded reference, should be mentally automatic when dealing with any rheumatic problem.

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† Read at the 187th Annual Meeting of The Medical Society of New Jersey, before the Section on Medicine, at Atlantic City, N. J., on Wednesday, May 20, 1953.

In recent years, the interpretation of x-rays has aided materially in diagnosing chronic gout. I plead for a careful scrutiny of joint films for gouty changes.

Uric acid is the end product of purine metabolism in man[12] and is a part of the pathophysiology of gout. The daily output of uric acid is estimated to be 200-500 mg. A "miscible pool" of soluble body uric acid has been described by Benedict and his associates,[13] with the use of isotope technics. They showed that the body saturation of gouty patients may be as high as 15 to 30 times normal. Using a tracer substance (labeled N 15) they demonstrated that endogenous uric acid may be derived from simple nitrogen and carbon precursors.[8,13] This proves that all uric acid does not arise from ingested preformed nucleoprotein. Thus dietary restriction of purines has little experimental support.

Various methods of estimating the plasma uric acid have been devised. It is generally accepted that the division between upper normal and abnormal concentrations is 6.0 mg. per 100 cc., when one of the newer technics is employed,[11] using serum or plasma in place of whole blood. The value of 6.0 mg. or over indicates gout only if renal azotemia, erythroblastosis, or leukemia are absent.

Examination of tophi, by identifying the urates, is a great aid in diagnosing gout. The tophus contains characteristic crystals, which have been acceptable to many as diagnostic, but Collins[15] states, "A tophus is not a tophus until it has been proved to contain urates, and the only proof is chemical identification." The murexide test identifies the urates in a simple manner.

PATHOLOGY

The newer concepts of pathology in gout are clearly and adequately described by Collins in his book, "The Pathology of Articular and Spinal Diseases."[15] The illustrations are original and clearly depict the gross and microscopic pathology.

Many have believed that gouty arthritis is an acute manifestation of osteoarthritis. Collins[15] has clearly demonstrated this to be a fallacy. Osteoarthritis is a complication of gout, and in many instances a severe one. Gout may be superimposed upon hypertrophic changes or osteoarthritis. These may be present before gouty changes are apparent.

The epiarticular, non-opaque tophi, may produce the necessary damage to the cartilaginous matrix to incite the pathologic changes of osteoarthritis. Gout in itself does not cause fibrillation of the cartilaginous matrix to a degree sufficient to develop blistering and erosion of the cartilage. It does, however, produce a minor saggital flaking of the superficial cartilage which simulates early osteoarthritis.

A thorough understanding of the pathology of osteoarthritis is essential for the interpretation of gouty findings, especially by x-ray. It is unfortunate that the arthroscope or a joint biopsy is at present not feasible in every case.

TREATMENT

Drug therapy of gout has been known since the fifth century A.D. There is evidence that the Byzantine physicians (1500 B. C.) used a drug which was probably identical to colchicine. Colchicine was introduced in Europe in 1763. Benjamin Franklin is reported to have brought it to this country.

We are familiar with the value of colchicine for its relief in gout and as a therapeutic test. Its action is still unknown. It is definitely not a uricosuric agent.

Salicylates are used in the treatment of gout, usually in conjunction with and following the use of colchicine. They have a mild uricosuric activity.

Cincophen was introduced in 1908 as Atophan®. It has been used successfully in the treatment of gout. Like the salicylates it is a uricosuric agent. Many observers have condemned its use because of occasional reports of fatal hepatitis. I believe that used with caution it may provide relief in many protracted cases without deleterious effects.

Studies of the anterior pituitary and the adrenal cortex were reported in 1946.[9] This was the start of a new era in the research of all rheumatic problems.

The introduction of cortisone and ACTH in 1949 suggested their use in gout. Cortisone

proved to be of little aid for the acute gouty individual and actually aggravated the chronic phase, but ACTH was found to be an active uricosuric agent during acute attacks. Its effectiveness is striking. Toxic manifestations rarely occur during the short period ACTH is used in acute gout.

Many observers feel that the mechanism involved when ACTH is used with the results noted, places gout in a class with the endocrinopathies. This is substantiated by the fact that all cases of gout show a low urinary output of 17-kestosteroids. ACTH increases the urinary uric acid output and lowers the blood uric acid level.

Other observers also have hypothesized that gouty subjects show evidence of hormonal dysfunction. They suggest that a metabolite of an abnormal adrenocortical androgen is necessary for susceptibility to gout.

Hydrocortone acetate[10] has been used by the author intra-articularly in gout with dramatic results. Other observations confirm these findings.

During the past year Butazolidin® (Phenylbutazone) has become available. Chemically it is a pyrrol derivative and has the potentiality of being toxic as shown in about 35 per cent of treated cases.

Butazolidin® is a very mild uricosuric drug, but it does lower the blood uric acid level. To date, Butazolidin® is more effective in the treatment of acute gout than in any other rheumatic disorder. It may be considered a substitute for colchicine in the acute phase, since in many cases the acute symptoms disappear within 24 hours. This rapid response of many an acute bout of gout to Butazolidin® obviates all the toxic effects because of the short period of treatment required.

The most outstanding development in drug therapy for gout is Benemid® (Probenecid.) Benemid®, is a potent derivative of benzoic acid with very low toxicity. It has a sustained uricosuric effect on both normal and gouty patients. The clinical value of Benemid® lies in the fact that it is applicable to all stages of gout. It is not an analgesic. It has been demonstrated,[23] "that Benemid® can mobilize the tremendously expanded miscible pool of the gouty patient and reduce the serum urate levels to within the normal range[8]."

More recent reports[22,23] describe a decrease in the size of tophi during Benemid® therapy. Fewer less severe acute episodes are notable features of this treatment. In some instances, Benemid® may produce a moderate aggravation of joint symptoms in the first two or three weeks of therapy.

As previously mentioned, salicylates have a uricosuric effect. To be effective, though, the dose must be so great as to render them intolerable. Salicylates and Benemid® simultaneously seem to interfere with one another,[24,25] each obstructing the other's uricosuric effect. They should not be administered together during the same period of therapy.

The toxic manifestations of Benemid® have caused only a few patients to stop this drug. Toxic symptoms thus far observed are gastrointestinal irritations, skin rash, renal colic, and hematuria, the last two being exceedingly rare. To date these toxic effects have been reversed by reducing the dose or stopping the drug.

The treatment of gout is divided into two phases; the acute episode and the chronic tophaceous form. Much of the success attained depends upon a correct diagnosis. Acute gout should offer little difficulty in diagnosis. Occasionally in chronic gout we are confronted with definite evidence of rheumatoid disease and gouty arthritis in the same patient. It is imperative to establish which disease (or both), the patient is suffering from.

Notwithstanding the newer drugs reviewed in this paper, colchicine remains the drug of choice by many. The following outline of treatment has served me best.

In the acute episode, rest is most essential; however, this is usually self-imposed by the severity of the pain. Whether complete or local rest is necessary depends upon the part involved. The avoidance of repeated trauma is essential so that undue aggravation is not imposed.

Generally colchicine is given in doses of 0.6 mg. (1/100 grain) every hour, until acute pain subsides, or until nausea or diarrhea occurs. Relief is usually obtained within a twenty-

four to thirty-six hour period. Then 0.6 mg. is given three times daily until all but minimal distress is controlled. Salicylates may then be added or substituted for the colchicine. The addition of small doses of barbiturates may be advantageous.

The dose of colchicine is not standard. A non-toxic dose must be determined for each patient. The relief obtained from colchicine is also a diagnostic test.

The use of Butazolidin® (Phenylbutazone) offers a more dramatic response. It is not however a diagnostic aid. Four hundred milligrams are given as an initial dose, followed by 200 milligrams every 4 hours for a 24 hour period. If necessary a dose of 200 milligrams three times daily may be continued until the patient is comfortable, unless toxic symptoms appear.

The procedure of choice should be repeated at the onset of each acute attack.

The treatment of all stages of gout with Benemid® is by far the most important. I believe it should be instituted as soon as the diagnosis is established. It has proved to lessen the severity and frequency of the attacks after extended usage. Benemid® should be administered in doses of 0.25 gram (one-half the standard tablet), twice daily for one week, so that the tolerance of the drug may be noted. This is followed by doses of 0.5 gram twice daily. If no toxic disturbances appear, this dose may be continued indefinitely, or until complete recovery is evident. It is recommended that sodium bicarbonate be administered with each dose of Benemid®, to alkalize the urine and prevent urate deposits in the urinary tract.

Benemid® is not an analgesic. Frequently gouty patients have residual distress and mild temporary aggravations of pain which require an analgesic. In the past, salicylates have been the drug of choice, especially when combined with small doses of colchicine, for the interim distress. As previously stated, salicylates and Benemid® seem to oppose each other in their action. The continued use of colchicine for a short time until the distress is relieved does not impede the effectiveness of Benemid® when they are used together. Usually Butazolidin®, given in doses of 100 mg. three or four times daily, in conjunction with Benemid®, terminates these mild episodes in a short time. Toxic manifestations must be carefully looked for if Butazolidin® is extended beyond a three or four day period.

Colchicine or Butazolidin®, when used for the interim distress, should be discontinued as soon as the patient is comfortable and reinstituted when aggravation occurs. Each patient will soon learn the dose needed to give him relief.

For the past few years I have not employed the dietary restrictions recommended for gout. My results have been comparable to those when restrictions were employed. My experience, and that of others,[8] with Benemid® has justified this conclusion. In my opinion, dietary advice should be given for such conditions complicating gout as obesity, diabetes, liver dyscrasias, etc.

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USES OF NALLINE*

Nalline® (N-Allylmormorphine hydrochloride) is a pharmacologic antagonist of narcotic drugs, apparently acting directly upon the central nervous system. It has little or no analgesic action of its own, and apparently does not antagonize morphine and its derivatives or meperidine (Demerol®) and methadone by virtue of a chemical action.

Nalline® will reverse the respiratory and circulatory depressive effects of overdosage with narcotics. Five minutes after its administration Nalline® counteracts the neurologic changes accompanying deep narcotic poisoning, such as loss of superficial and deep reflexes, absence of corneal and gag reflexes and pupillary constriction. Nalline® is advised as the specific antidote for the treatment of overdoses of morphine and its derivatives, meperidine and methadone. It is, however, not a cure for addiction.

In parturient women who have received meperidine, Nalline® given 10 minutes before delivery relieves the depressive effect on the infant. Nalline® is ineffective against the depression due to barbiturates, cyclopropane or ether.

The lethal dose of Nalline® has not been determined for humans, However, no more than 40 mg. should be given in a single dose, and its administration should be accompanied by the usual supportive measures of artificial respiration and oxygen until its full effects are achieved. Toxic effects due to high doses of Nalline® consist of dysphoria, myosis, pseudoptosis, lethargy, drowsiness, and sweating, as well as nausea, heaviness of the limbs, and hot and cold flashes. In addicts, Nalline® may be followed by typical abstinence symptoms.

*From the University of Michigan Medical Bulletin, Nov. 1952.

BUTAZOLIDIN® IN THE TREATMENT OF ARTHRITIS†

CLINICAL STUDIES WITH PHENYLBUTAZONE

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This preliminary report summarizes one year's experience with Butazolidin in the treatment of a variety of arthritic disorders. The therapeutic response to be anticipated, toxic effects, and undesirable side effects are comprehensively outlined.

Butazolidin ® * (phenylbutazone), a new synthetic, non-hormonal compound, was first synthesized in 1946 in the Geigy Laboratories of Basle, Switzerland. In Europe, a combination of Butazolidin ® and aminopyrin in equal parts was made available as a parenteral preparation under the tradename of Irgapyrin.® Over the past few years there has appeared in the European literature a series of favorable clinical reports on this combined therapy not only in rheumatoid arthritis but also in virtually the entire field of rheumatic disorders.

Under the stimulus of these reports, an identical preparation (but prepared in oral as well as injectable form) was studied in the United States with encouraging results. The clinical effects and toxicity of aminopyrin are well known and it was a logical step to determine the clinical value of Butazolidin ® alone.

PHARMACOLOGY

Several reports have appeared describing the pharmacologic properties of Butazolidin.® The compound appears to possess many interesting characteristics that suggest possible usefulness outside the field of arthritis. Otherwise, it exercises three pharmacologic actions of particular interest to the rheumatologist: it is analgesic, antipyretic, and anti-inflammatory. This last-mentioned property, demonstrable in the experimental animal through inhibition of artificially-produced inflammation, may explain the action of the drug in producing objective evidence of joint improvement in the arthritic patient.

CLINICAL INVESTIGATION

Patients for study were referred to the Arthritic Clinic of St. Mary's Hospital, Passaic, New Jersey. Complete physical examination was supplemented by laboratory studies which included urinalysis, complete blood count, determination of the blood sugar, blood urea nitrogen, blood uric acid, Wassermann reaction, sedimentation rate, circulating eosinophiles, platelet count, plasma vitamin C content in some cases, x-rays of the involved parts, and electrocardiograms. Gastrointestinal studies were done when indicated either before or after treatment or both. Patients were seen weekly for 3 months and every 2 or 3 weeks thereafter. Motion pictures before and after treatment were taken of patients with various rheumatic disorders. Early in treatment weight was recorded daily and later at weekly or bi-monthly intervals.

CLINICAL MATERIAL

Approximately 400 patients with various rheumatic and allied disorders are now under investigation. Of this number 156 cases were selected for this report because they have been observed for at least 6 to 12 months. Investigation with Butazolidin ® began in August, 1951. The vast majority of these patients was treated with intramuscular injections as long as improvement of their disease was demonstrated. When a plateau was reached, they were either changed to oral medication alone or given tablets with an intramuscular injection at regular intervals of 7 to 10 days. A few patients were given intravenous therapy.

The following disease entities were treated: rheumatoid arthritis, 43; osteo-arthritis, 55; mixed arthritis, 12; gout, 6; Marie-Strümpell

† From the Medical Service and Arthritic Clinic of St. Mary's Hospital, Passaic, New Jersey. Read at the Rutgers School of Pharmacy, February 17, 1953.

* Butazolodin was kindly supplied for this study by Geigy Pharmaceuticals, Division of Geigy Co., Inc., New York, N. Y.

arthritis, 8; herniated disc, 3; bursitis, 20; sacro-iliac myositis, 6; acute rheumatic fever, 2; chronic rheumatic fever, 1.

A few miscellaneous entities were also treated. These included 1 case each of neuroblastoma with widespread bony metastases, status asthmaticus, Raynaud's syndrome and carcinomatosis, the primary lesion being an adenocarcinoma of the rectosigmoid, proved by laparotomy. These cases are not included in the final statistical report but are mentioned only because of the stimulus they may produce in directing further work along these lines by other investigators.

The youngest patient treated was 3.5 years of age, the oldest 84, the average age being 55.8 years. Those with rheumatoid arthritis averaged 41 years of age, osteo-arthritis 60.4 years, mixed arthritis 68 years, gouty arthritis 40.3 years, Marie-Strümpell arthritis 38.8 years and those with bursitis 44.7 years of age. There were 63 males and 93 females in this series.

DOSAGE

Butazolidin ® was administered intramuscularly in a 20 per cent solution of its sodium salt.‡ Each 5 c.c. ampule contains 1 gram of Butazolidin ® plus a small amount of local anesthetic to offset the pain of injection. The oral tablets are 200 mg. and 100 mg. each. Placebo tablets were identical in size and shape and contained sugar, glucose and calcium lactate.

Most patients were given 5 c.c. of Butazolidin ® intramuscularly daily, as long as the daily weight remained approximately unchanged. With an increase in weight of 2 or 3 pounds or more the dosage was reduced to 1, 2, or 3 c.c. accordingly. Over a period of 7 to 10 days it is usually possible to determine the optimal daily maintenance dose for the individual patient. (Improvement clinically usually occurs in conjunction with weight gain.)

In the young individual weight gain due to sodium retention and edema is not a serious problem. There is little or no complaint from such patients even though they gain 4 to 7 pounds. Older patients, however, are uncomfortable, complaining of fullness in the epigastrium, "bloating," ankle edema and dyspnea. Edema may even invade the face producing what resembles the "moon face" so commonly noted during treatment with cortisone. In patients with acute or severe disease the dosage is maintained as high as possible even in the face of edema if this edema causes no obvious harm. In elderly patients, and in individuals with cardiac disease, one obviously must be extremely cautious. Of 4 cases of acute pulmonary edema produced by Butazolidin ® in this series, 3 gave no history of cardiac disease and preliminary work-up gave no evidence of this disorder. The fourth case demonstrated that one or two 5 c.c. injections of Butazolidin ® can precipitate acute failure in the previously compensated case. A salt free diet is valuable in all cases where edema is undesirable. Another important point about dosage early in treatment has to do with those patients who give a history of stomach disorder. Large dosage may produce marked epigastric distress and nausea whereas smaller dosage may not. This effect may be produced in patients who give no history of "stomach trouble" and in these patients the dosage must be reduced. All patients with demonstrable peptic ulcer were refused treatment.

Following the initial 7 to 10 days' treatment by injection, the patients were changed to tablets usually equivalent to the intramuscular maintenance dose. This is usually in the order of 200 mg. to 800 mg. daily. Booster injections may be given at weekly intervals or longer as required. Tablets are best taken following meals or with milk. Three patients were given intravenous therapy, with extremely small dosage, only to eliminate pain at the site of injection.

RHEUMATOID ARTHRITIS

CASE ONE

A thirty-nine year old white male bus driver was seen for the first time on November 16, 1951. He stated that in January of 1951 following a severe sore throat he began to have pain in his neck, subsequently spreading to his right shoulder and right knee. Within 2 months, all of his joints were involved. Swelling, redness, pain and limitation of motion were the prime symptoms. He had received cortisone 100 mg. daily for 4 days, 75 mg. daily for

‡ Ampules of Butazolidin ® are not as yet commercially available.

3 days, and then 50 mg. daily for 23 days without benefit. There were no previous illnesses of a severe nature.

Examination revealed an acutely ill, very depressed young man. He was unable to walk without assistance. To seat himself was very painful and he could barely rise from a sitting position. His heart and lungs were normal. The blood pressure was 90/50 mm. Hg. Pulse rate was 110/min. Positive findings were swollen, hot, tender joints involving the hands, elbows, shoulders, knees, and ankles. There was severe pain on flexion or extension of the neck. No joints could be manipulated rapidly.

Laboratory examination showed the blood and urine to be within normal limits except for the sedimentation rate which was very rapid. The electrocardiogram was normal. X-ray of the chest revealed no disease. X-ray examination of the hands revealed early arthritic changes of the rheumatoid type involving the mid-phalangeal joints. His weight was 180 pounds.

He was given 5 c.c. of Butazolidin ® (1 gm.) intramuscularly on November 17, 1951. Four hours later he had little or no pain. The next day he reported that he felt much better: swelling was less and he could walk without assistance. He continued to receive 5 c.c. of Butazolidin ® daily. His maintenance dose was in the order of 800 mg. daily. On January 7, 1952, he drove a trailer-truck from New Jersey to Connecticut. He slowly reduced his daily intake of Butazolidin ® to 200 mg. daily and on June 7, 1952 discontinued the medication entirely. He has had no recurrence of his original acute disease and returned to his original job on February 14, 1952. Repeated laboratory examinations have remained normal except the blood uric acid which decreased in amount. The first normal sedimentation rate is recorded on January 18, 1952. after 63 days of treatment.

Butazolidin ® was administered to 43 people with rheumatoid arthritis. The results were evaluated according to the criteria of the American Rheumatism Society. These are recorded in Table I.

Of the 43 patients treated, all but one showed some measure of improvement. Thirty, or 69.8%, showed Grade I or Grade II therapeutic response. In chronic disease, continued administration of Butazolidin ® was necessary to maintain clinical improvement. In the early stage of acute disease, however, the maintenance dosage may be reduced to as little as 200 mg. daily, and in a number of cases the drug was discontinued without return of symptoms. One case showed absolutely no response. This patient has been on 150 to 175 mg. of cortisone daily for 2 years. He had gained 40 pounds in weight, had an elevated blood pressure and blood sugar and, although he had had relief of symptoms early in his treatment, had noted an exacerbation of signs and symptoms. He was given Butazolidin ® in large doses for 5 weeks without benefit. Other patients who had had cortisone therapy demonstrated a very slow or delayed response depending upon how much cortisone had been taken daily, the duration of therapy, and the time elapsed since the therapy had been discontinued. In general, the longer the patient was free of cortisone the better the response to Butazolidin.® This observation is strictly a clinical one, the cause of which is not known.

TABLE I.
RESPONSE § OF RHEUMATOID ARTHRITIS TO PHENYLBUTAZONE THERAPY

		Grade of Response No. Patients				
STAGE	CLASS	I	II	III	IV	TOTAL
I	I					0
II	I	0	0	0	0	0
	II	1	6	1	0	8
	III	0	4	3	0	7
	IV	2	2	0	0	4
III	I	0	0	0	0	0
	II	2	4	0	0	6
	III	1	4	3	1	9
	IV	0	0	1	0	1
IV	I	0	0	0	0	0
	II	0	3	1	0	4
	III	0	1	2	0	3
	IV	0	0	1	0	1
Totals		6	24	12	1	43

§ According to the criteria of the American Rheumatism Association:

Stage is the extent of rheumatoid progession, objective changes increasing from mild (I) to severe (IV).

Class is the functional capacity of the patient, ranging from complete activity (I) to incapacitation (IV).

Grade is the response of rheumatoid activity to therapy, ranging from complete remission (I) to complete lack of effect (IV).

OSTEO-ARTHRITIS

CASE TWO

A sixty-one year old housewife was referred to the clinic with a history of swelling and pain in both knees of 7 months' duration which was becoming progressively worse. She had been unable to walk without assistance for 4 months. Treatment consisted of cortisone, 100 mg. daily for 4 months, penicillin, X-ray therapy, postpartum plasma, procaine locally, and finally a chiropractor administered vinegar compresses to her knees. Both cortisone and postpartum plasma were administered while the patient was hospitalized and she appeared to improve. However, 10 days after she

was out of bed her signs and symptoms returned in spite of the continued use of these therapeutic agents. A few days before she was seen at the clinic she had suffered a fall which aggravated her symptoms. Physical examination was negative except for markedly swollen, hot, tender knee joints. She was unable to stand without assistance and any motion of the knee joints produced exquisite pain. Except for an elevated sedimentation rate, laboratory examination of the blood and urine was normal as was x-ray of the chest and electrocardiogram. X-ray examination of the knees, however, revealed moderate osteo-arthritic changes in both knee joints with marked soft tissue swelling.

She was given 7 c.c. of Butazolidin® parenterally on January 9, 1952 and reported that within 4 hours her pain had almost completely gone. However, there was slight nausea. The next day she was given 5 c. c. of Butazolidin.® This produced nausea and vomiting. Thereafter, she received 2 to 3 c. c. of Butazolidin.® daily and her nausea ceased. After 7 days of treatment, the swelling in her knees was almost completely gone. Her maintenance dose is 600 mg. daily. One of her knees looks perfectly normal and the other still has a slight degree of swelling. There have been occasional days when she has had some pain lasting for a few hours but in general she has been well and has been able to do her daily chores without discomfort. Repeated laboratory work revealed no abnormalities. The sedimentation rate, however, is still moderately elevated.

Fifty-five patients with degenerative joint disease (osteo-arthritis) were treated with Butazolidin.® Of this group 6 had minimal disease, 26 moderate disease, 13 advanced disease and 19 very advanced disease. On full courses of Butazolidin® there were 8, or 14.3%, complete remissions; 35, or 63.8%, showed marked improvement and 12, or 21.9%, showed minimal to moderate improvement.

RHEUMATIOD ARTHRITIS WITH DEGENERATIVE JOINT DISEASE

Twelve patients with "mixed arthritis" were treated with Butazolidin.® All showed some degree of improvement. The results are shown in Table II.

TABLE II.

RESPONSE OF "MIXED ARTHRITIS" TO PHENYLBUTAZONE THERAPY §

		Grade of Response No. Patients				
STAGE	CLASS	I	II	III	IV	TOTAL
II	II	0	3	2	0	5
	III	0	2	1	0	3
III	II	0	2	0	0	2
	III	0	1	1	0	2
TOTALS		0	8	4	0	12

§ Refer to Table I for interpretation.

GOUT

CASE THREE

A forty-two year old white male was first seen on January 1, 1952. During the previous two years he had had six severe bouts of gout, each lasting from 1 to 7 weeks.

Previous treatment consisted primarily of colchicine and cortisone. Relief had been obtained by both medications. However, he stated that cortisone had been much more effective when used for the first time and that with subsequent attacks had lost a great deal of its benefit.

Physical examination was essentially negative except for a weight of 234 pounds and a markedly swollen, hot, painful right knee, right ankle, and right foot. The patient was on crutches. Laboratory examination of the blood and urine revealed a blood uric acid level of 7.4 mg.% and an elevated sedimentation rate. X-ray examination revealed minimal bone destruction about the joint spaces. In the great toe there was noted the characteristic rounded areas of lessened density just behind the articular surfaces. Butazolidin,® 5 c.c. daily, was started on March 22, 1952. Eight hours after the first injection the pain was gone and within 48 hours the swelling was gone. After 10 days of treatment a blood uric acid level was reported as 1.7 mg. per cent. For the past 8 months the maintenance dose has been 200 mg. twice a day. The weight has been maintained at 240 pounds and dietary salt has not been restricted. He has had no recurrence of his arthritis to the present.

Six cases of gout were treated with Butazolidin.® Five of these patients were acutely ill when treatment was started. All had elevated blood uric acid levels and all demonstrated x-ray evidence of bone damage. On full courses of Butazolidin® therapy there were 5 complete remissions and one marked improvement. Uric acid studies are shown in Figure 1.

BURSITIS

CASE FOUR

A thirty-eight year old white male was seen on January 11, 1952. He stated that for 2 weeks he had recurrent attacks of pain in his right shoulder and that 24 hours before seeking aid he developed continuous severe pain which had completely incapacitated him. Examination was negative except for marked tenderness of the right shoulder on palpation and motion. Periarticular swelling was present and point tenderness was detected over the subacromial bursa. There was marked limitation of motion especially when the shoulder was abducted or rotated internally. Blood and urine examinations were all within normal limits. X-ray examination of both shoulders revealed no evidence of calcification.

Butazolidin,® 5 c.c. daily, was started on January 12, 1952. Marked improvement was noted in 7 hours. All pain was gone, and full motion restored

within 24 hours. The patient received 5 c.c. daily for 3 days, and then 200 mg. twice a day orally for one week. The patient has received no medication since, and has had no recurrence of his bursitis.

Twenty cases of bursitis were treated with Butazolidin.® Of these 7 were of the chronic variety of months' and years' duration. Ten were acute, from a few days' to a few weeks' duration, and the rest were of the intermittent subacute type. There were 13 complete remissions, 4 marked improvement, 1 minimal improvement, and 1 failure. In general, the more recent the onset of symptoms the better response to therapy.

RHEUMATOID SPONDYLITIS
(Marie-Strumpell's Disease)

CASE FIVE

A forty-eight year old white male was seen for the first time on January 25, 1952, complaining of severe pain and stiffness of his thoracic and cervical spine. He stated that his symptoms began when he was in his early twenties and became progressively worse. During the past six years pain, stiffness, and limitation of motion had increased markedly, and six months ago he had been in an automobile accident which had further injured his spine. Pain had become so intense that large quantities of aspirin were consumed, and finally this was coupled with whiskey to offset the pain. He had never had chemotherapy of any sort. His past history revealed that he had been hospitalized for 4 months for pulmonary tuberculosis and that for the past seven years he had had a draining rectal fistula.

Physical examination revealed an acutely ill man with marked tremor and exhaustion due to lack of sleep. Positive findings were exquisite pain and stiffness of the cervical and thoracic spine. Any motion of the head produced severe pain. Laboratory examination of the blood and urine was normal except for a markedly elevated sedimentation rate. The electrocardiogram was normal and a chest X-ray revealed old healed tuberculosis with calcification. Roentgenologic examination of the spine revealed advanced arthritic changes especially in the cervical area. The bodies of the vertebrae had become somewhat square shaped and new bone formation had occurred surrounding them. Complete fusion had not yet taken place. The laminae and transverse articulations were involved in the new bone formation and there was narrowing of the articulations between the articular processes.

Butazolidin,® 5 c.c. intramuscularly, was started on January 26, 1952. The next day the patient reported that within 1 hour there was approximately 50 per cent relief of pain, in 2 hours, complete relief, but that within 7 hours all pain had returned. He received 5 c.c. daily and by the sixth day all pain was gone and motion of his neck had improved so that there was no limitation of motion due to pain but only that due to the partial ankylosis. His maintenance dose for many months has been 200 mg. four times daily. For the past month it has been 200 mg. three times daily. He also received a 5 c.c. injection about every 2 weeks. Repeated laboratory examination has revealed no abnormalities of the blood. The uric acid level was lowered, and sedimentation rate was recorded as normal for the first time two months after treatment was started. He has remained comfortable, stopped drinking alcohol and now has a responsible position. The drug has produced no side effects in this particular individual.

Eight cases of ankylosing spondylitis were given full courses of treatment with Butazolidin.® All showed some degree of improvement. The results are recorded in Table III.

TABLE III.
RESPONSE OF RHEUMATOID SPONDYLITIS TO PHENYLBUTAZONE THERAPY §

		Grade of Response				No. Patients
STAGE	CLASS	I	II	III	IV	TOTAL
II	III	0	2	0	0	2
III	II	0	1	0	0	1
	III	0	1	0	0	1
IV	II	0	0	1	0	1
	III	0	2	1	0	3
TOTALS		0	6	2	0	8

§ Refer to Table I for interpretation.

SACRO-ILIAC

Six patients with sacro-iliac disease were treated with Butazolidin.® Of this number 2 were classified as very severe, and 4 as moderately severe. There were 4 complete remissions and 2 markedly improved. These patients were on treatment for an average of 2 months when treatment was discontinued. There have been no acute exacerbations up to the present.

HERNIATED DISC

Three patients with herniated discs were treated with Butazolidin.® One was very severe, 2 moderately severe. Two showed moderate improvement, and in one there was no demonstrable effect.

RHEUMATIC FEVER

Two cases of acute recurrent rheumatic fever were treated with Butazolidin.® Both were mild with slight elevation of temperature and moderately swollen joints. None had evi-

dence of carditis clinically. Both showed marked improvement with complete disappearance of joint symptoms. The sedimentation rate, however, remained elevated. One case of chronic rheumatic fever also showed a similar good response.

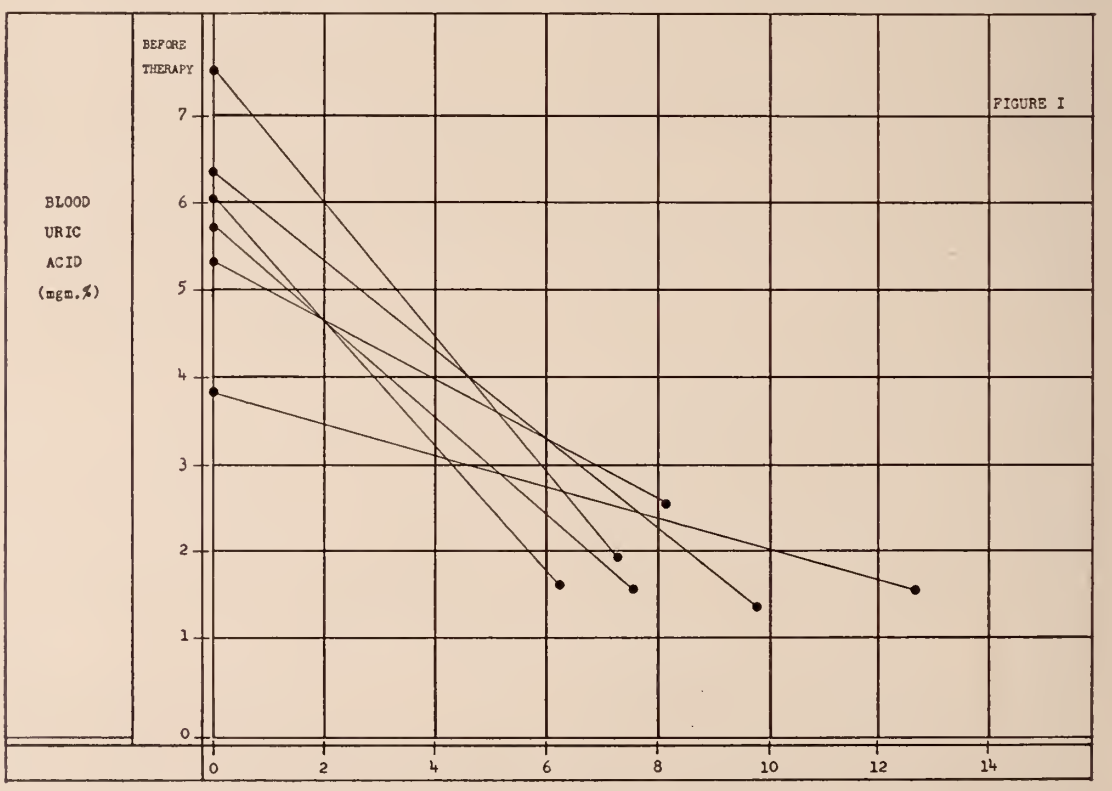
The acute cases were maintained on therapy for three months. There has been no recurrence of signs or symptoms following cessation of therapy. The chronic case has been on maintenance therapy for 7 months without recurrence of signs or symptoms.

MISCELLANEOUS

One very severe asthmatic was seen for the first time in an acute attack. One 5 c.c. injection of Butazolidin ® produced complete relief of all wheezing and dyspnea in about 10 minutes. The patient remained comfortable for about 1 hour while being observed. On going out into the cold winter air, however, he noted an immediate recurrence of wheezing. During the next half hour his signs and symptoms became progressively worse to the point of marked cyanosis, convulsive twitching, and unconsciousness. Intravenous adrenalin and aminophylline were required to terminate the attack.

One case of severe Raynaud's disease was treated with symptomatic improvement. Definite evidence of objective improvement was lacking.

A child of 5 years with neuroblastomatosis and widespread bony metastases was treated for 9 weeks. Prior to therapy she demonstrated such severe pain in her spine that she was unable to be moved, maintained her knees in constant extreme flexion, and for a period of 3 weeks screamed day and night about the pain in her back. There was one metastatic lesion protruding from the forehead between the eyes and two from the second and third ribs anteriorly on the left side. She would not eat, had marked pallor, and appeared to have only a few more days to live. She was given 400 mg. orally, three times a day. Within 24 hours her pain was almost completely gone and she was able to extend her legs. In 5 days, the metastatic lesions on her forehead and chest had decreased to about one third



their original size. With the aid of transfusions this child improved to the point of regaining her appetite and actually leaving her bed for a chair. Transfusions were given weekly. This improvement lasted 6 weeks when the neoplasm began to invade vital centers. She expired after 9 weeks of treatment with Butazolidin.®

A white woman of seventy years of age with carcinomatosis from a primary rectosigmoid adenocarcinoma was given Butazolidin ® in an attempt to reduce materially the amount of Demerol ® needed to control her pain. Prior to therapy she required 50-100 mg. of Demerol ® every 4 to 6 hours. On Butazolidin,® 400 mg. four times daily, one dose of 100 mg. of Demerol ® was required in each 24 hour period. The patient refused to do without the narcotic, feeling that it would prevent the painful attacks she experienced. Whether the control of pain was due to Butazolidin ® or to the fact that it caused a decrease in the excretion of Demerol ® is problematical. It probably was a combination of both.

BLOOD AND URINE STUDIES

Blood and urine examinations were made before treatment, and repeated examinations were made at frequent intervals during treatment.

Butazolidin ® causes a very definite fall in blood uric acid levels. In a few cases there was a fall in total white count and decrease in polymorphonuclear count. However, therapy was not discontinued and the counts returned to normal. Platelet counts may be lowered. One count was recorded below 100,000 per cubic millimeter. No consistent effect was noted in the urinalysis, red blood cell count, hemoglobin, sedimentation rate, blood sugar, blood urea nitrogen, circulating eosinophiles, vitamin C, or serum potassium levels.

In this series there have been no instances of severe leukopenia, but in one case purpura was noted and the platelet count was reported as 84,000 per cu. mm. Figures I and II and Table IV show these results in graphic form.

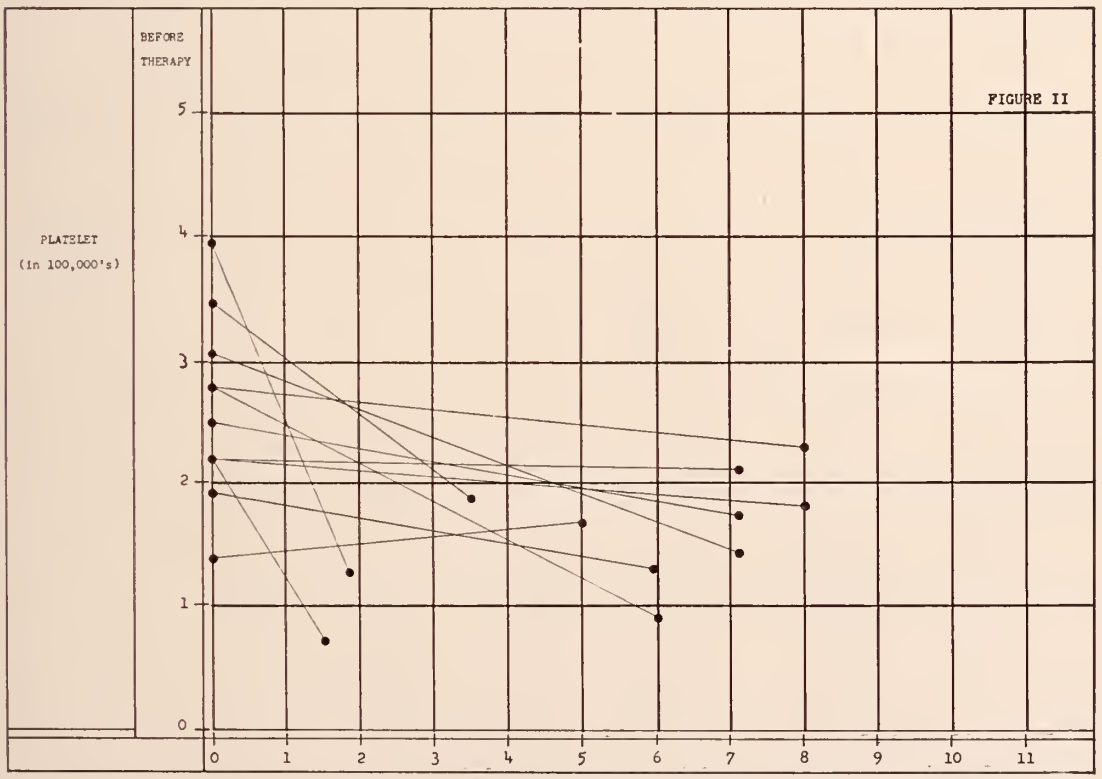


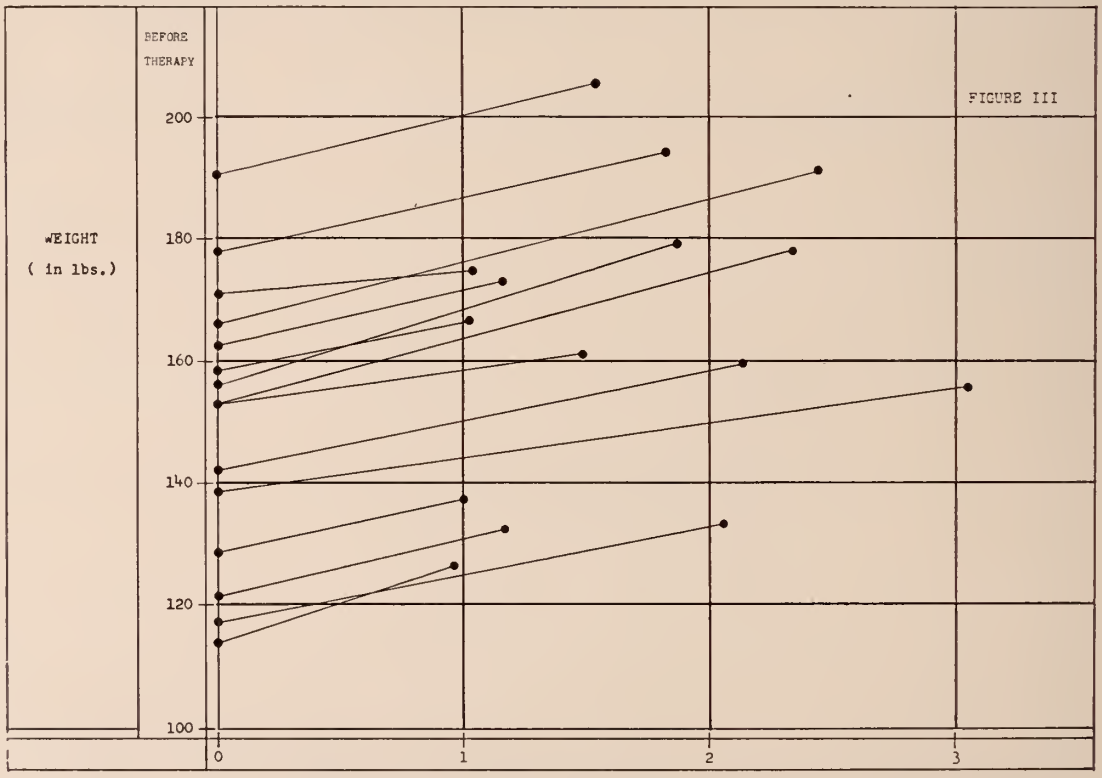
FIGURE II

TOXICITY

Thus far Butazolidin® has been remarkably free of side effects. We are inclined to believe, however, that as this compound becomes more generally used there will be reports of serious toxic effects most of which will probably be based on allergic phenomena. To date over 400 patients have taken or are taking this compound. There have been no fatalities and the only serious side effects encountered can now be avoided with proper measures.

The most common side effect is sodium retention and, hence, edema. This can be produced in any patient. Reduction of dosage with careful control of sodium intake generally causes the edema to subside. As noted above, sudden weight gain without visible evidence of edema will warn the physician to introduce preventive measures. One hundred fifty, or 95 per cent, of the patients in this series had either weight gain alone or demonstrable edema within the first week of therapy. This is demonstrated in Figure III. Associated with this effect, there were four cases, or 2.5%, who demonstrated acute pulmonary edema, and two, or 1.2%, who complained of dyspnea. Fifteen patients, or 9.5%, complained of nausea. Three patients, or 7.9%, complained of epigastric distress. Of these, one was of such serious nature that discontinuance of the drug was necessary. This particular patient had a history of previous stomach disorder, and subsequent gastrointestinal series revealed an active duodenal ulcer which apparently had been aggravated by the use of Butazolidin.® In one patient without a history of stomach disorder, but with a definite alcoholic history, there was produced a massive gastric hemorrhage. Subsequent examination revealed gastric ulceration. Whether this was produced by the drug, or whether a previous subclinical ulceration was aggravated by the drug is not known.

Drug rash was encountered in 6 patients, or 3.7%. In one case it was accompanied by fever. In 4 cases the drug was discontinued until the rash was gone. This usually takes 2 to 4 days. Treatment was then reinstituted using smaller doses. The rash recurred in 1 case but with a third course of therapy did not recur. In 2 cases without discontinu-



ance of therapy but with lower doses the rash disappeared.

Other side effects noted are relief in dysmenorrhea, decrease in the number of days of menses, and no menses in patients who previously had periods lasting 1 to 2 days. However, their menses were re-established when medication was discontinued or dosage lowered. One patient demonstrated loss of taste which returned when the drug was discontinued and did not recur when it was instituted again with lower dosage. Two patients demonstrated delayed healing. One patient with rheumatoid arthritis had worn a hearing aid for ten years. Three months after institution of Butazolidin ® therapy he noted that he could hear without his hearing aid. He has not required this instrument now for 4 months.

COMMENT

Unquestionably, Butazolidin® has proved to be one of the most interesting and remarkable drugs under investigation at the present time. It produces rapid and dramatic beneficial clinical effects in various rheumatic disorders. Its action appears to be suppressive in chronic disorders and it has the ability in some cases to terminate acute disease without recurrence after therapy is discontinued. The beneficial effect in gout is prompt and lasting. The decrease in serum uric acid levels is rapid and specific. Interestingly enough, just what happens to the uric acid is not known. It is not found excreted in the urine as it is in patients receiving conventional therapy.

The drug can be given orally, intravenously, or intramuscularly and is well tolerated. Its mode of action is unknown. Evidence thus far indicates that it does not act on the pituitary-adrenal interrelationship. Yet, in some patients on relatively large doses of cortisone (100-150 mg.) for long periods of time, Butazolidin ® has little or no effect. In others it has a delayed action. This may be due to the well-known cortisone withdrawal symptoms. Beneficial effects far outweighed any

TABLE IV. LEUKOCYTE REACTIONS TO BUTAZOLIDIN®

Patient	Age	Sex	Duration of Treatment	White Cell Count		
				Initial	Lowest	Final
PF	49	M	8 Months	9050	7200	7950
RF	54	F	1 Year	9300	6000	7600
BH	55	F	11 Months	8600	7650	8500
WK	37	M	1 Year	9850	7600	8200
FS	28	M	11 Months	8400	5800	10,900
VT	30	M	11 Months	10,200	7350	10,350
HV	39	M	1 Year	9050	6850	10,050
MS	44	F	1 Year	6200	5850	9100
JH	65	M	1 Year	10,500	6650	7700
BC	51	M	1 Year	8000	7850	9950
VC	37	M	10 Months	10,000	8450	9000
JC	42	M	1 Year	8400	6850	7100
JC	43	M	7 Months	9500	6750	11,000
VC	27	F	1 Year	8150	7000	8400
MC	27	F	7 Months	8800	7100	8300
GC	44	M	6 Months	8100	8000	8850
EB	61	F	9 Months	8300	7450	8550
LB	43	M	1 Year	13,250	7800	12,250
JB	37	M	6 Months	8100	7200	10,100
FA	42	F	8 Months	8200	7000	8205
AP	48	M	11 Months	9050	6500	9000
IG	61	F	10 Months	10,100	6550	8350
IG	27	M	9 Months	8650	8000	10,000
RD	32	M	10 Months	10,000	7200	9000
AD	56	F	10 Months	9050	7000	7700
JK	50	F	7 Months	8500	6500	7500
AK	44	F	8 Months	9200	7600	9000
WK	41	M	7 Months	13,300	7450	9100
JK	60	M	6 Months	13,750	10,750	11,800
PA	52	M	6 Months	8000	7000	7000

toxic effects produced in this series during 12 months of investigation.

SUMMARY

1. One hundred fifty-six patients with a variety of rheumatic disorders were treated with Butazolidin® for 6 to 12 months. These disorders included rheumatoid arthritis, 43; osteo-arthritis, 55; mixed arthritis, 12; gout, 6; bursitis, 20; rheumatoid spondylitis, 7; herniated disc, 3; sacro-iliac disease, 6; acute rheumatic fever, 2; and chronic rheumatic fever, 1.

2. In the entire group there was produced complete remission in 25.5%, marked improvement in 49.6%, minimal improvement in 23.3%, and no effect in 1.8%.

3. Butazolidin® has no effect on red cell counts, hemoglobin, blood sugar, blood urea, circulating eosinophiles, serum vitamin C or potassium. Although it is suspected that this drug group may occasionally inhibit white blood cell formation, there were no instances of true leukopenia, granulocytopenia or agranulocytosis. One platelet count is recorded below 100,000. Effect on serum uric acid is specific. There is a prompt decrease to very low levels.

4. Toxic effects included sodium retention with weight gain, with or without edema, in all patients; dyspnea in 2, pulmonary edema in 4, rash in 6, nausea in 15, epigastric distress in 3, reactivation of duodenal ulcer in 1, reactivation or production of gastric ulcer in 1.

5. Butazolidin® may be given orally, intramuscularly or in small doses intravenously. It may be administered for long periods of time and in general the dosage can be gradually lowered.

6. With discontinuation of Butazolidin® therapy there are no severe withdrawal symptoms. In chronic disease, symptoms may recur in 5 to 8 days. In acute cases there may or may not be recurrence. Reinstitution of therapy produces prompt relief.

7. One year is too short a time to evaluate a new drug. However, the following precautionary measures are suggested: Patients with cardiovascular disease must be treated with low doses and examined frequently for signs of cardiac decompensation. Patients with a history of peptic ulcer should not be treated. If treatment is mandatory, however, ulcer therapy must be given at the same time. Frequent white blood counts and platelet counts are advised early in treatment and at regular intervals of 2 to 3 weeks later in treatment.

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X-RAY OF THE BREAST

Radiology has been little used in the diagnosis of carcinoma of the breast. With improved technics, x-ray may be called upon to aid in determining the presence of early breast cancer. A lateral and tangential view of each breast are adequate for screening purposes, but an additional spot film with a small cone in either the lateral or tangential direction is advised for the examination of a diseased breast. A small lead shot applied to the skin over the lesion is of help in indicating to the radiologist the area for close scrutiny.

The diagnostic x-ray critera* of malignancy of the breast are: 1) The size of the tumor is less on the film than on palpation. 2) The radiopacity of the tumor is greater than that of surrounding tissue; this contrast is greater the fattier the breast tissue. 3) Punctate calcifications are seen in and around many malignant tumors. 4) The margins of a malignancy are irregular, tentacled, and spiculated. 5) The perifocal tissues in the tumor bed of a cancer are blurred and distorted.

Other findings associated with breast malignancy are: 1) Alterations in the position of the nipple. 2) Local or diffuse skin thickening, with or without retraction. 3) Accentuation of the trabeculae. 4) Increased vascularity of the parenchyma and subcutaneous fat layer.

*Gershon-Cohen, J. and Ingleby, H.: Carcinoma of the Breast. Radiology, January 1953.

PERFORATED GASTRIC ULCER DURING CORTISONE THERAPY FOR RHEUMATOID ARTHRITIS*

(Report of a Case)

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Perforated peptic ulcer as a complication of cortisone therapy for rheumatoid arthritis is described, with emphasis on the altered clinical picture of this abdominal emergency.

Numerous reports regarding the value of pituitary adrenocorticotropic hormone (ACTH) and cortisone in the treatment of a variety of diseases indicates that these substances are important therapeutic agents. The interval since the introduction of these preparations has been comparatively short; however, observations thus far show that the scope and limitations of these drugs are fairly well defined. With their greater availability, caution should be exercised in prescribing these preparations and their use reserved for those conditions in which they are definitely indicated. Self-medication with these potent products has proved safe only with close supervision.

It is now well established that treatment with adrenocortical steroids may be harmful, as demonstrated in the case reported here.

In reviewing the literature, Beck, *et al.*[3] reported a case of perforation of an acute duodenal ulcer in a young woman with polyarteritis nodosa being treated with ACTH. The perforation occurred on the seventh day of treatment. Habif, *et al.*[5] described perforation of a duodenal ulcer in a 54-year old woman who had received ACTH therapy for amyotrophic lateral sclerosis. This complication occurred nine hours after cessation of therapy which had been given for 36 days. This patient had no ulcer symptoms prior to institution of her therapy. Sandweiss, *et al.*[8] reported four cases of duodenal ulcer, two of which were treated with cortisone and two with ACTH. One of the patients on cortisone was a young woman of 33 years who became symptom-free and remained so for nine months. The remaining three patients were all men; one was given cortisone and the other two ACTH. None of these patients was helped; in fact, in one the drug had to be discontinued because of symptoms of impending perforation. In this same report, a case was presented in an addendum of Dr. Seymour Gray from the Peter Bent Brigham Hospital, in which a 66-year old woman with a gastric ulcer was treated with ACTH. At the onset of treatment, she was asymptomatic but within 24 hours her symptoms recurred and became progressively worse so that it was felt that there was danger of perforation. Medication was stopped on the tenth day and roentgenographic and gastroscopic examination revealed no evidence of healing of the ulcer. In February 1951, Smyth[9] reported three patients in whom adrenocortical steroid treatment of other diseases aggravated a known ulcer. Two of these cases had duodenal ulcers; one perforated on the fifth day of treatment, and the other had hemorrhage on the twenty-second day. The third case, a man 33 years of age with a gastric ulcer, perforated on the fourth day of treatment. Rosenberg, *et al.*[7] reported four patients with duodenal ulcer who had exacerbation of symptoms while receiving corticotropin for other conditions. No complications were encountered and the symptoms were readily controlled by antacid medication. Moe[6] reported a case of gastric ulcer occurring during a course of cortisone therapy in a woman 45 years of age, who did not have symptoms prior to receiving the drug.

CASE REPORT

A. E., a 63-year old white male, was admitted to the hospital on January 30, 1952 as an acute sur-

* This paper has been approved for publication by the Chief Medical Director of the Veterans Administration.

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gical emergency. The patient stated that he had been well until January 29, 1952, when, after eating his supper, he noted pains in his upper abdomen. The pain was sharp, localized and constant. After several hours it became necessary for him to call his family doctor who examined the patient and gave him an injection. This brought temporary relief, but through the night the pain became more severe and the patient was unable to sleep. The next morning, he was again visited by his doctor who ordered him to the hospital.

Past medical history revealed that the patient had a left herniorrhaphy in 1940 and was treated for high blood pressure and arthritis in 1942. He received multiple forms of therapy for the latter with only fair results. He has been unable to work since 1943. In 1951, he had a Baker's cyst excised from his left popliteal area. His family and social history were non-contributory. The systemic review was essentially negative except for some weight loss and generalized aches and pains in his joints, accompanied by marked deformity.

Physical examination showed a patient who appeared exceptionally well except for the visible deformities of his hands and fingers. Temperature, 100.2 degrees F.; pulse, 130; respirations, 18; blood pressure, 130/90. The pupils were contracted due to an injection given before he was sent to the hospital. His tongue was dry and coated white. The heart and lungs were normal. The abdomen was rigid and tender to palpation, particularly in the left upper quadrant. The rigidity was board-like over the entire abdomen. Peristalsis was absent. The hand and fingers showed marked deformities with limitation in motion. This was also true of the joints of the lower extremities. There were well healed scars of previous surgery. A diagnosis of perforated peptic ulcer was made and steps were taken to prepare the patient for surgery. The hemogram showed an erythrocyte count of 3,270,000; hemoglobin 11 gm.; leukocyte count, 15,3009 with 93 per cent polymorphonuclear cells, 30 per cent of which were stab forms. A urinalysis was negative except for a trace of albumin. Survey films of the abdomen showed considerable free air under the domes of the diaphragm with a greater amount under the left dome. A Levin tube was passed into the stomach and continuous suction drainage instituted. Intravenous infusion was begun.

After entering the abdominal cavity, a partially sealed perforation in the anterior antral portion of the stomach was noted. It was 2.5 cm. from the pylorus and 1.5 mm. in diameter. A section was taken for biopsy and the perforation closed with interrupted atraumatic catgut sutures; a tag of omentum was tied over the repaired area. The abdomen contained a small amount of milky and slightly sanguinous material. The peritoneal cavity was thoroughly aspirated. The incision was closed without drainage. The patient did well through surgery. He was given 500 cc. of blood following the operation and made an uneventful recovery. Penicillin and streptomycin were given in 300,000 units and 0.5 gm. doses, twice a day for five days. The culture of peritoneal exudate showed nonhemolytic streptococcus and staphylococcus aureus which were sensitive to penicillin, streptomycin, Terramycin® and aureomycin. Wangensteen suction was discontinued on the second day.

On the fifth post-operative day it was first learned that the patient had been getting cortisone therapy for his arthritis. This came about unexpectedly when the patient's wife asked if he should continue this drug and at the same time informed us that the patient was unaware of the fact that he was getting cortisone; this information was being withheld to keep the patient from worrying about the cost of the treatment. The patient started cortisone therapy on January 8, 1952, receiving 300 mg. for the first five days and then the dose was gradually reduced to 50 mg. daily. He was still getting this medication on January 29, 1952, for a total of twenty-one days.

A postoperative gastric analysis showed a total acidity of 6 and a free hydrochloride acid of 0 units in the fasting specimen, with a total acidity of 86 units and 58 free hydrochloric acid units in the first specimen. A gastrointestinal x-ray series on February 11, 1952, showed prominent rugal folds, an irritable and slightly rigid antrum. No active ulcer could be demonstrated and the stomach emptied in two hours. The biopsy taken at surgery showed a benign ulcer. The patient was discharged on February 20, 1952, improved and asymptomatic. He was advised to follow an ulcer program under the care of his family doctor.

COMMENT

The cause of the deleterious effect of pituitary adrenocorticotropic hormone on peptic ulcer is not clear. It may be due to stimulation of the gastric glands. Spiro, *et al.*[10,11] found that ACTH administration produces an increase in both gastric pepsin and uropepsin excretion. Functioning gastric glands are necessary for this response and it is mediated through the adrenal, since patients with adrenal insufficiency excrete no uropepsin and do not respond to ACTH with an increased uropepsin excretion. Thorn, *et al.*[12] feel that gastric acidity remains unchanged after ACTH administration in normal subjects. Sandweiss, *et al.*[8] found higher nocturnal secretion of free hydrochloric acid after cortisone therapy than before in two cases of duodenal ulcer.

The inhibiting effect of adrenocortical steroids on wound healing and fibroblastic proliferation also might affect adversely healing of peptic ulcer. This is a controversial point.

In animal experiments, several authors seem to prove that there is no difference in this respect;[1,4] Bangham[2] feels that there is retardation of healing; however, Alrich, *et al.*[1] feel that clinically there is slowness in healing even though their animal experiment study does not confirm this.

In our case, the most striking features were the good general appearance, the feeling of well-being, and the moderately severe pain in the presence of a board-like abdomen due to peritoneal irritation of some nineteen hours' duration. Habif, *et al.*[5] noted this same picture.

This patient had no previous gastro-intestinal complaints. It is possible that he had an asymptomatic gastric ulcer prior to his cortisone therapy; it is also possible that the ulcer developed while he was receiving the drug. He has had no gastrointestinal complaints since his discharge from the hospital.

It is again emphasized that care be used in the administration of these drugs and that they be withheld in ulcer cases.

SUMMARY

1. A case is reported in which perforation of a gastric ulcer occurred in a patient taking cortisone therapy for rheumatoid arthritis.

2. There is no proof that the ulcer did not exist prior to cortisone therapy. However, the initial appearance of an acute perforation 21 days after the start of cortisone administration in a patient who had no prior gastro-intestinal symptoms suggests that the ulcer developed after therapy was begun.

3. The appearance of well-being, except for pain, in the presence of generalized peritoneal irritation with board-like rigidity of the abdomen, is emphasized.

4. Extreme caution is urged in the use of adrenocortical steroids in the treatment of disease, particularly if associated with peptic ulcer. It is recommended for the present that a conservative medical regimen still be the treatment of choice unless specific indications for surgical intervention exist when peptic ulcer supervenes.

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THE CHLORIDE TEST IN DROWNINGS AND DEATH DUE TO OTHER CAUSES*

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The blood chloride test as a method of differentiating death due to drowning from death due to other causes has been questioned and found to be of little value.

Death due solely to asphyxia by submersion in fresh or sea water is sometimes difficult to establish by any means, whether by chemical examination of heart's blood or by gross or microscopic examination of the pathologic material. This is especially true when the postmortem findings are complicated by such conditions as skull fracture, intracranial hemorrhage, coronary arteriosclerosis, large quantities of drugs or alcohol in the tissues, etc. Where postmortem degenerative changes have taken place, it becomes almost impossible to identify even the few characteristic changes that have taken place if death is due to drowning alone. The various combinations of circumstances leading up to death and the pathologic findings of a person found dead in water can be very troublesome to the medical examiner in determining the cause of death.

Gettler [1] in 1921, assuming that the whole blood chloride is the same on both sides of the heart, devised a blood chloride test for drowning based on a difference of the chloride concentration of whole blood in the left and right heart chambers. He felt that water aspirated into the trachea and lungs during drowning would immediately find its way into the left ventricle and dilute the blood therein. If the drowning fluid were sea water (1-2% NaCl), the chloride in left ventricular blood would be increased and conversely decreased if the drowning fluid were fresh water.

The validity of this chloride test as a method in determining death due to drowning is questioned since, as will be shown, relative disproportion of blood chloride in the left and right chamber can be found when death is due to causes other than drowning. The strongest objection to this or to any other chemical test[2] is the fact that clotted and partially hemolyzed blood may be encountered in the heart, and though the sample of this blood is accurately weighed out or pipetted quantitatively, the question still arises as to whether it was plasma, serum, or clot that was measured. This is important because of the fact that plasma contains greater quantities of chloride than do the cells. Any relative increase in volume of clot or cells in the sample studied will decrease the amount of total chloride when determinations are done on the combined clot, plasma, or serum and cells.

In this laboratory chloride determinations are done on whole blood that has been pipetted from the heart. The chlorides are precipitated as silver chloride from whole blood with silver nitrate in the presence of nitric acid. Excess silver nitrate is titrated with standard thiocyanate solution, using ferric ammonium sulfate as an indicator.

Since some clotted blood may be encountered in one or both ventricles of the hearts examined and since only small clots passed into the pipette, it seemed fitting to do hematocrit studies on the samples analyzed from the right and left chambers to determine the ratio of cells, or cells plus clot, to plasma or serum and to see what effect the ratio had on the results of the chloride determinations.

RESULTS

Postmortem hematocrit studies on 43 persons in which no chloride determinations were done (Table I) showed an elevated hematocrit of blood in the left chamber. Of this number, 29 showed either chicken fat or currant jelly

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TABLE I

Cause of Death	No. of Cases	No. of Cases Showing Clotted Blood in One or Both Ventricles
Myocardial infarction	2	2
Congestive heart failure	1	1
Alcoholism	4	3
Morphine poisoning	2	2
Skull fracture	11	7
Barbiturate poisoning	1	1
Pulmonary embolism	1	0
Ruptured liver	1	1
Fatty liver (congestive viscera)	4	2
Violent death (subway train)	4	1
Subdural hemorrhage—no skull fracture	1	0
Carbon monoxide poisoning	5	4
Multiple fractures	1	1
Stabbing	2	1
Perforated duodenal ulcer	1	1
Methyl alcohol poisoning	1	1
Burns and carbon monoxide poisoning	1	1
Total	43	29

clot or a combination of each type of clot in one or the other ventricle. In the remaining 14 cases, fluid blood was found in both chambers. Whether the hematocrit determination was done on the clotted blood or whether the blood was filtered through gauze and the hematocrit done on the filtrate, the relative ratio of cells, or cells plus clot, to plasma or serum remained higher in the sample from the left chamber.

Results of the postmortem hematocrit and chloride studies on eleven drownings are summarized in Table II. While the hematocrit values in the salt water drownings showed no consistency in respect to elevation on the right or left sides of the heart, there were differences in the total chloride content with a significant elevation of the chlorides in the left chamber in all the cases studied but one. Although the relative difference of the total chlor-

TABLE II. CHLORIDES IN DEATH DUE TO DROWNING

Case	Hematocrit			Total Chlorides (mg. %)			Plasma Chlorides (mg. %)		
	Rt.	Lt.	Diff.	Rt.	Lt.	Diff.	Rt.	Lt.	Diff.
L. C.	57(F)	49(F)	— 8	512.5	594.3	+ 81.8			
R. P.	66(C)	56(F)	—10	390.7	495.9	+105.2			
Box 123	50(F)	20.1(F)	—29.9	494	586.5	+ 92.5			
X-Wm.	54(F)	80(F)	+25	419.9	478.4	+ 58.5	448.2	531	+ 82.8
J. S.	53(F)	66(F)	+13	483.9	605	+121.8			
W. G.	41(F)	60(F)	+19	467.7	505.7	+ 38	501.8	564.2	+ 62.4
S. B.	37(F)	69(F)	+32	463.8	532.9	+ 69	505.7	643.1	+137.4
X-Wm.	42(F)	85(C)	+43	491.1	496.3	+ 5.2	555.4	660.6	+105.2
J. K.	39(F)	58(F)	+19	504.7	561.2	+ 56.5			
R. B.	28.3(F)	63.4(F)	+35.1	433.6	436.5	+ 2.9			
F. O.	44(C)	87(C)	+43	380	351.7	— 28.27			

Case	Amount of Hemolysis		Site of Death	Chemical Analysis (Tissue)
	Rt.	Lt.		
L. C.	0	++	North River	Alcohol = 3+
R. P.	++	+++	East River	Alcohol = 3+
Box 123	0	+	East River	Alcohol = 3+
X-Wm.	+	++	Hudson River	Negative
J. S.	0	0	Harlem River	Not done
W. G.	0	+	North River	Alcohol = 4+
S. B.	0	±	Harlem River	Alcohol = 3+
X-Wm.	+	+±	Hudson River	Alcohol = 3+
J. K	0	0	Hudson River	Negative
R. B.	±	++	Bathtub	Paraldehyde = 4+
F. O.	+	++	Bathtub	Negative

F = Fluid blood
C = Clotted blood

Hemolysis: 0 = None
± = Trace
+ = Slight
++ = Moderate
+++ = Intense

TABLE IIIa. ELEVATED CHLORIDES IN DEATH DUE TO CAUSES OTHER THAN DROWNING

Case	Hematocrit			Total Chlorides (mg. %)			Plasma Chlorides (mg. %)			Amount of Hemolysis		Cause of Death	Chemical Analysis (Tissue)
	Rt.	Lt.	Diff.	Rt.	Lt.	Diff.	Rt.	Lt.	Diff.	Rt.	Lt.		
J. C.	49(C)	8(C)	—41	398.9	638.5	+239.6				0	0	Spontaneous cerebellar hemorrhage	Negative
H. G.	38(C)	26(C)	—12	282.5	348.8	+ 66.3				±	0	Chronic glomerulo-nephritis and uremia	Not done
E. H.	60(C)	80(C)	+20	390.7	411.2	+ 20.2				+	+++	Barbiturate poisoning and alcoholism	Barbiturate Alcohol = 3+
G. F.	74(C)	22(C)	—52	398.5	516.4	+117.9				±	0	Boxing—subdural hemorrhage	Not done
X-Wm.	94(C)	80(C)	—14	313.7	353.7	+ 40				+	+	Lobar pneumonia	Negative
R. R.	78(C)	30(C)	—48	351.7	384.9	+ 33.2				+++	+	Suppurative bronchitis Cor pulmonale	Alcohol = 2+
P. H.	31(C)	21(C)	—10	341.0	398.5	+ 57.5				±	0	Acute yellow atrophy	Negative
R. M.	55(C)	48(C)	— 7	380.7	390.7	+ 10				0	±	Early pneumonia with consolidation	Alcohol = 2+
P. L.	56(C)	57(C)	+ 1	374.1	396.5	+ 22.4	365.4	415.1	+ 39.7	+±	++	Carbon monoxide poisoning	
C. A.	58(F)	68(F)	+10	398.5	418.9	+ 20.4	456.9	489.1	+ 32.2	0	0	Nitrous oxide poisoning	
R. G.	50(C)	62(C)	+12	354.7	417.0	+ 62.3	369.3	434.6	+ 65.3	±	0	Barbiturate poisoning	

TABLE IIIb. DECREASED CHLORIDES IN DEATH DUE TO CAUSES OTHER THAN DROWNING

C. C.	50(F)	62(F)	+12	527.1	503.7	— 23.4				0	0	Skull fracture	Not done
X-Cm.	42(F)	87(C)	+45	439.4	436.5	— 2.9				0	±	Subdural hemorrhage	Negative
W. M.	48(C)	74(C)	+26	401.4	377.1	— 24.0				0	+±	Automobile—multiple fractures	Not done
R. F.	75(C)	62(C)	—13	289.3	169.6	—119.7				+++	++	Burns—patient charred	Alcohol = 3+ CO 30%
X-Wm.	36(F)	76(C)	+40	460.9	439.4	— 21.5	477.4	424.8	— 52.6	0	±	Hanged	Alcohol negative
H. S.	68(C)	82(C)	+14	398.5	397.5	— 1.0				±	±	Asphyxia from bolus of food	Alcohol = 4+

ide is only 5.2 milligrams in this one case, the difference in the plasma chlorides is greater. In three other cases in which plasma as well as total chloride determinations were done, the plasma chlorides were not only higher than the total chlorides in the samples from each side of the heart but the differences gave higher values. The total chlorides varied in the two fresh water drownings (R. B. and F. O., Table II), although showing an elevated hematocrit in the left chamber of the heart. In one (R. B.) there was fluid blood in both chambers of the heart and an increase in the total chloride in the left ventricle, and in the other case (F. O.) the heart's blood was clotted and the chloride was increased on the right. Both of these persons were found dead with their heads submerged in water in a bathtub. In the case with the elevated left ventricle chloride, chemical examination of the brain revealed large quantities of paraldehyde. Chemical examination of the other was negative. It would be a simple matter to say one died of drowning and the other died of paraldehyde poisoning. But the fact remains that both were found submerged in water.

Table IIIa demonstrates that the total blood chloride in the left chamber can be elevated when death is due to causes other than salt water drowning.

Table IIIb demonstrates that the total blood chloride in the left chamber can be decreased when death is due to causes other than fresh water drownings.

Preliminary studies were begun in which the inflow and outflow tracts of the heart were clamped and the heart was removed *in toto,* with the entire contents of the left and right heart placed in separate containers. The contents were then digested with streptokinase to insure fibrinolysis and complete liquefaction of the heart blood. Such studies indicate that samples of blood treated in this manner more closely approach Gettler's postulate.

SUMMARY

The validity of the chloride test by this method in the differentiation of death due to asphyxia by submersion from death due to other causes has been studied and it appears to be of little value.

The author wishes to acknowledge the technical assistance of Mr. Henry Hoffman of the Laboratory of the Chief Medical Examiner for his work in obtaining the chemical data.

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"AEROPLAST" DRESSINGS

The Air Research and Development Command of the United States Air Force has issued a progress report on its experience with "aeroplast," a spray type of surgical dressing. The transparent plastic dressing is applied directly to burned or injured areas of the body from an aerosol pressurized container. It provides immediate protection, and obviates gauze bandages. "Aeroplast" has many advantages over gauze dressings since it is rapidly applied, is transparent, and can be easily removed for dressing changes. It can be applied to parts of the body which are difficult to bandage with gauze.

In case of large scale disaster "aeroplast" may be especially valuable, as it can be used by an untrained person, is cheaper than gauze, and can be stored indefinitely in much less space than is required by usual cloth dressings.

Further tests of this new dressing material are planned for hospitals throughout the United States.

PREVENTION OF ATHLETIC INJURIES IN HIGH SCHOOL

Max M. Novich, M.D., Newark, N. J.*

The prevention of injuries in school athletes depends on the cooperation of the academic administration, the coaching staff and the team physician. This comprehensive report outlines the responsibilities of each in an important branch of preventive medicine.

Each school desires a winning team and justifiably so, but victory should not be achieved at the cost of serious injury to the participants. Every coach, player, athletic director, principal, and board of education member is cognizant of injuries of varying severity and frequency. The following paragraphs are presented in an effort to promote the elimination of injuries in all fields of sports.

The prevention of athletic injuries is dependent upon three major factors:

1. Academic administration supervised by the principal and faculty with the cooperation of the board of education.
2. The athletic administration supervised by the athletic director and coaches.
3. The medical department supervised by a physician with experience in athletic injuries.

Each has separate responsibilities and duties which must be integrated and coordinated if the frequency and severity of athletic injuries are to be minimized.

The academic administration of an institution is basically responsible for the completeness of its athletic program. It is the authority which establishes the athletic administration and approves the program of that administration. The academic administration must provide the following:

1. A competent coach and staff.
2. Adequate and satisfactorily fitted equipment for each member of each team in each sport.
3. Suitable playing fields for each sport with proper supervision of these plants; e.g., removal of stones from outdoor fields, proper chlorination of swimming pools, proper amount of floor padding for boxing rings, etc.
4. Adequate health and accident insurance for each student athlete whether he competes interscholastically or intrascholastically. If a sport is educationally sound, it then becomes part of the course of study; as such the entire cost should be underwritten by the board of education.
5. A competent physician, preferably one trained in traumatic or orthopedic surgery, who is genuinely interested in sports and has available x-ray and physical therapy facilities.
6. An adequate, well-equipped locker and training room with first aid equipment and a trainer versed in first aid.
7. A dietitian to regulate and instruct coaches, players, and the players' parents on proper diets during the season and off season.

Lloyd, Deaver and Eastwood[1] established that the incidence of athletic injury is definitely related to the years of training and experience of the head coach. Lustig[2] emphasizes that the coach must not know only the fundamentals and intricacies of his sport, but he must also be able to prevent and minimize athletic injuries. The coach must know equipment and proper fitting; he must know how to get the athlete in proper condition for a particular sport; he must know first aid; he must be able to recognize fatigue states; he must know how to use and apply protective strappings. Competent coaching can prevent athletic injuries provided the coach is concerned with even the most minute details, from graduated muscular exercises to the proper fitting of a shoe.

Charles J. Schneider,[3] head of Weequahic High School Department of Physical Education, recommends that high schools engage coaches who have been educated in physical

* Orthopedic consultant to the Weequahic High School Athletic Association and to the Newark Athletic Club Golden Gloves, and Physician to the New Jersey State Athletic Commission.

education because they have received proper instruction and training in physical fitness and psychology. Their training in the field of physiology makes it possible for them to be conscious of the physical and psychologic well-being of their youthful charges. Coaches who have been trained in their sport are the next best choice because they have become aware of all the physical and psychologic aspects of their particular sport. These wise suggestions are concurred in by Victor DiFilippo,[4] Director of the Department of Health, Physical Education, and Recreation of Seton Hall University.

While teaching and imparting the mechanics of a sport to athletes, the coach should at the same time be developing the physical fitness of his athletes for the sport involved. Thorndike [5] advocates a course of training including "diet, sleep, graduated muscular exercise, and the absence of all drugs." These are the bases for getting an athlete properly prepared for competition.

Boys who are obese or very thin, awkward, slow moving, or ill-trained are more prone to injuries. Build up your athletes properly, and the incidence of injuries will drop. The well-muscled and conditioned athlete is seen infrequently in a doctor's office.

We all are aware of the additional amount of energy that is expended when competing in athletics. Yet, few coaches supervise the diets whence the energy comes. Ability and morale make for excellent athletic competition, but these have to be substantiated with good, solid food. More of the necessary food essentials, particularly proteins and carbohydrates, are needed by competing athletes.

In colleges training tables are provided to guide the athlete, but such facilities are lacking at the pre-college level. The chief site of condemnation is the inadequate lunch and inadequate pre-game meal in which the athlete usually indulges. Most high-school athletes content themselves with frankfurters and soda. How efficient can a practice session be with improperly fed boys? The same is true of the pre-game meal. No real effort is made to see that the young athlete comes to a game after an adequate meal. Have your athletes properly fed, and the performance will be to the best of their abilities. Suggested diets for athletes prior to practice sessions and games can be found in almost any recognized text on nutrition. I have found *Dietotherapy-Clinical Applications of Modern Nutrition,* by Michael G. Wohl,[6] very satisfactory.

All sports depend on the muscular activity of an athlete for feats of skill, dexterity, and stamina. One tries to develop an athlete to a point where his musculo-skeletal system works automatically in all situations as if each muscle had its own mind. However, every muscle, to be fit for sports, must function in all its parts. This completeness of function is accomplished through progressive exercises and special training in the specific field of endeavor. Not only does this fully-developed muscular system permit greater and more prolonged activity but also gives a good padding of muscle to protect against athletic injuries.

Muscles may be built up through graduated muscular exercises with isolated muscle training for muscles particularly important in a certain sport. Schneider [7] recommends that coaches instruct their boys to join supervised, weight-building classes in off seasons and to take summer work that will increase endurance and stamina for the athletic seasons. This program will facilitate a boy's preparation for his sport and allow the coach more time to concentrate on the technics of the sport. So try to plan your sport year by helping the prospective athlete keep in trim twelve months a year, twenty-four hours a day.

In sports and games an athlete is only as good as his legs. Therefore, develop the lower extremities from hip to toe inclusive, with definitive exercises. Develop quick and nimble starts in a gradual manner. Many tears of the muscles of the thighs are sustained as a result of quick starts from the crouching position without a preliminary period of stretching these muscles for this unaccustomed strain.

Crisler [8] and Bible[9] have written books on football and how to build up the body specifically for this sport. I am sure many of these football exercises can be carried over into other sports.

According to Louis Stamelman,[10] head football coach, Weequahic High School, it is the

coach's personal responsibility to "warm up" his athletes before each game or practice session so that all of the weight-bearing muscles are stretched, and the joints have a complete range of motion. At least ten minutes or more should be used for warm-up exercises whether for competition or inter-squad drills to simulate game situations. A little muscular toning by an athlete before a game or practice will save him many hard bumps and bruises, muscle tears, and sprains later on. Be firm in developing your athletes, insist on regular attendance at all training periods and complete cooperation in each phase.

Not only does a coach train his athletes, he also may overtrain them. He must constantly be on guard for physical and mental fatigue. Thorndike [5] stresses the fact that physical fatigue has a sizeable component of mental fatigue with it. If a boy starts complaining of loss of appetite, irritability, insomnia, and the occurrence of many minor mistakes in practice sessions, suspect a fatigue situation. If he is "stale" or has some mental or emotional disturbance, give "a vacation or break in the monotonous routine of daily practice for one or more sessions, together with an adequate period of physiologic rest."[5] Some coaches prefer having the athletes report daily to the field in their "civvies," but I believe one or two days away from practice is a more suitable remedy for the situation. If there is an emotional disturbance, try to determine the reason and take the necessary steps to treat this problem. A boy in this frame of mind is "in the early stages of a nervous breakdown"[5] and must be treated with a great deal of professional wisdom.

Crisler[8] has stated that improper equipment stands second in a list of four causes for injuries in football. The athlete has a right to assume that the equipment issued him will afford adequate protection. Therefore, it is imperative for the coach to concern himself with all aspects of equipment in addition to formations, scoring plays, schedule making, etc. The coach must be able to know fashioning and fit of protective pads and uniforms and the proper fit of a pair of shoes. No expense must be spared to prevent injuries.

A simple rule to follow for each sport is to uniform the athlete so that all exposed and vulnerable portions of the body are protected and at the same time freedom of action commensurate with safety is allowed. Each sport has its own needs, and the coach should know them.

Shoes are in a class by themselves, and in most sports are probably the most important piece of equipment. They support the bones of the foot and also the ankle when the high-top type is used. "It must fit properly so as not to rub up blisters or irritate the foot. It should be as light as can be made compatible with the main function of protecting and supporting the foot."[8]

In contact sports, like football, lacrosse, hockey, etc., every part of the body is exposed to serious injury if not protected adequately. It would be utterly impossible to have a functioning football player and still have the player absolutely protected. Yet, we do have protective equipment at our disposal that practically insures safety for the participants. Lustig [2] has long recommended that shoulder pads be manufactured with a larger anterior apron. This improvement would protect pectoral muscles, clavicles, and ribs. A sponge rubber hose collar beneath the shoulder pads, as first developed by Horowitz,* helps minimize shoulder bruises and broken collarbones. Hip-pad devices for baseball and basketball players significantly reduce injuries about the hip. In boxing it is a "must" for boxers to wear cup protection for their genitalia, and cups may be employed for any or all sports where the groin is unnecessarily exposed.

A "charley horse" is a hematoma of the quadriceps but can occur in other muscles. A hematoma of the thigh can usually be avoided in body contact sports by taping thigh guards to the thighs so the muscles are adequately protected. This was used for years by William Foley** of Bloomfield before its adoption by other coaches. If these injuries are not properly treated, serious consequences may occur in

* Former head football coach, East Side High School, Newark, N. J.

** Former head coach, Bloomfield High School football team.

the nature of ossification in the clot, producing bone in the muscle fibers (myositis ossificans traumatica). These ossified muscle fibers result in diminished extension of the knee. This injury is common to all sports.

Knee pads should be used by football players, basketball players, and players of other sports where landing on the knees is common. This bit of protection will cut down knee bruises, abrasions, and swollen knees. If the pads on the market do not fit your needs, fashion your own from felt.

Headgear must be worn in all sports where an exposed head may sustain serious injuries. This applies to practice sessions as well as competitive ones. Blows to the head may produce serious consequences, and all head injuries do not necessarily show their pernicious effects at the immediate time of the blow. Be wary of head blows. The headguard in football, as well as in boxing, should protect the frontal part of the skull, the eyebrows, base of the skull and the ears. The headguard is now used in intercollegiate boxing and is being adopted by some states in the professional ring. It certainly has cut down on cut eyes, "cauliflower ears," and miscellaneous bruises and cuts of the face. A plastic baseball cap is now being experimented with in the big leagues to cut down on head injuries from "bean balls."

There are also special pads to protect tender, weakened parts. These devices are usually homemade after consultation with the team doctor and serve best when strapped directly to the skin.

The knees and ankles are very often injured in sports. This is to be expected because of their construction and location. Adequate protection for the knee is best accomplished biologically with well-developed thigh musculature. Mechanically, some help can be given to a slightly sprained knee with a Duke-Simpson knee strapping.[5] If a player has sustained a severe sprain of the knee, it is wiser to rehabilitate the knee to normal and excuse the player for the rest of the season. In this way more serious injury to the knee will be avoided.

Ankle injuries can be kept at a minimum by the combined use of definitive exercises to increase the strength of the ankle joint and its surrounding muscles and preventive ankle strappings. This may be done with adhesive tape or ankle wraps. It is important to strap the ankle with the foot in slight eversion and at right angles. Not only are sprains prevented, but the dangers of epiphyseal separations and displacement with fractures around the ankle joint are minimized. Preventive ankle strappings should be worn for all games and practice sessions. If adhesive tape is used around the ankle joint, the hair should be shaved off and compound tincture of benzoin applied prior to the application of the adhesive tape.

The coach must note and follow up each and every injury incurred by his boys. This applies to everyday practice and regulation games. He must have nightly conferences with the team doctor about the health of his team. Every injury must be noted and attended regardless of severity. Coaches should know the symptoms of the common injuries of the sport they are teaching. They must respect the team doctor's opinion about an athlete's condition. Outward appearances are many times deceiving. Wait for complete healing of an injured athlete despite his pleading or his parents'. The coach should know first aid so that he may be of real service to an injured athlete until the team physician can be reached. It is the coach's business to know and teach the right way to avoid injury. The coach must show the player how, but the boy must learn to execute the maneuvers correctly.

The team doctor must be one who is genuinely interested in sports and must like being associated with young boys. Physicians realize that recurrent injuries result in permanently weakened ligaments and unstable joints; but it is hard to convince some overzealous athletes, their parents, and even some coaches.

My relations with my administration and coaching staff are excellent, and my only real difficulty is convincing an injured boy that he will harm himself if he continues to play.

Doctors should make it a point to visit the team frequently, particularly during practice sessions. It is an excellent morale factor. Be available following each game. You are sure to get a few visitors at that time.

It is absolutely necessary that a doctor be in attendance where large numbers are engaged in body-contact sports.

Team doctors should employ a follow-up system for care of injuries. These competitors are very young and full of energy. They are afraid that a visit to the doctor may keep them from playing. When a player has been hurt and does not report for treatment as he should, the doctor must inform the coach or the boy's parents about the situation. If treatment is necessary, the player must get it whether he likes it or not. We are dealing with adolescents, and we must be firm. If this follow-up system is used, permanent disabilities from athletic injuries will be minimized or prevented.

41 Clinton Place

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SPHINCTEROTOMY FOR PANCREATITIS

Chronic pancreatitis of the relapsing type is a frequently overlooked cause of intermittent abdominal pain. Its symptoms are often attributed to other conditions, especially gallbladder disease, with which relapsing pancreatitis is commonly associated. It is probably, however, a fairly common cause of the postcholecystectomy syndrome. The pathogenesis of this clinical state depends on spasm of the sphincter of Oddi with regurgitation of bile into the pancreas via the duct of Wirsung, which enters the common duct just proximal to the sphincter in a fair proportion of persons. The alkalinization of bile by pancreatic juice makes the former toxic and causes edema of the pancreas.

Relapsing pancreatitis, or acute pancreatic edema (in contrast to the necrotizing type known as acute pancreatitis, a much rarer and more serious form), is characterized by pain in the upper abdomen with nausea and vomiting, rarely preceded by overindulgence in alcohol. The pain is usually epigastric, and radiates straight through to the back. There is epigastric tenderness, muscle spasm, fever, leukocytosis, transient clinical or subclinical jaundice and glycosuria. The serum amylase is almost always high in the early stages of severe attacks, but returns to normal as the attack subsides. A high incidence of gallbladder disease accompanies relapsing pancreatitis.

Because of the etiologic significance of spasm of the sphincter of Oddi in relapsing pancreatitis, Major and Ottenheimer* have recently reviewed sphincterotomy via the transduodenal route in this disease.

The operation should not be done during the acute phase. The gallbladder is removed, and the sphincter exposed by passing a large Bakes dilator through the common duct to the sphincter, and then curving it so that the dilator tents the anterior wall of the duodenum. The sphincter is divided anteriorly over the dilator, after an incision has been made into the duodenum, for about one centimeter. A T-tube is inserted in the common duct through the sphincter and left in place for 6 weeks to prevent contracture formation.

Using this approach, these authors report that of 23 patients, 20 have had complete relief. The series is small and the follow-up period too brief for complete evaluation of this procedure, but further investigation is warranted.

*Major, J. W. and Ottenheimer, E. J.: Transduodenal Sphincterotomy for Chronic Relapsing Pancreatitis. New England J. Med., 248:130, Jan. 22, 1953.

STATE ACTIVITIES

EDWARD J. ILL AWARD TO DR. HENRY B. ORTON





In recognition of his accomplishments as a surgeon, teacher and citizen, the Academy of Medicine presented Dr. Orton with its highest formal distinction, the Edward J. Ill Award on May 28, 1953. The Ill Award was established by the academy in 1939 in honor of the late Dr. Edward J. Ill, its first president. Dr. Orton was the fourteenth recipient of the award.

Dr. Orton has made important contributions in the field of cancer of the larynx for which he has received national recognition. He pioneered in surgical anatomy of the neck and in surgery of laryngeal malignancies, and taught at the New York Polyclinic Medical School. He has received numerous awards and citations for his teaching contributions in head and neck surgery. He has served all 16 hospitals in Essex County and others in the state.

Largely through his efforts, the State Legislature of New Jersey introduced and passed a bill requiring that every product containing lye be marked 'poison'; this was an important advance in Dr. Orton's fight to prevent injuries to children from household products containing lye.

Dr. Orton, left, receives the Edward J. Ill Award for distinguished service as surgeon, teacher and citizen presented on behalf of the Academy of Medicine of New Jersey by Dr. Lewis W. Brown, right; retiring president of the academy. Dr. Edward C. Klein, Jr., incoming president, looks on.

MOBILE PHYSIOTHERAPY UNIT

The City of Philadelphia has recently acquired the services of a fully equipped mobile physiotherapy unit for the home treatment of needy patients suffering from arthritis. It has been presented to the Eastern Pennsylvania Chapter of the Arthritis and Rheumatism Foundation by the Beneficial Saving Fund of Philadelphia.

The unit consists of a three-quarter ton truck equipped with "walk-in" doors and special physical therapy devices, including a portable microtherm unit, a thermopore for controlled wet heat, 3 infra-red lamps, a portable treatment table, a hand vibrator, and two baking appliances. It will also carry a collapsible walker, and an exercise bicycle, plus a muscle stimulating apparatus. A trained physiotherapist will supervise treatments rendered from the mobile unit.

WORLD MEDICAL ASSOCIATION MEETING

The First Western Conference of the World Medical Association was held in Richmond, Va., April 21-25. Dr. Watson B. Morris (left) of Springfield was selected by Governor Driscoll to represent this state at the meeting.

The Conference was marked by informal social gatherings and a scientific session.

A highlight of this meeting was the extension of an invitation to one physician from each state and territory who had attained the age of 75. Every state in the union was represented by a doctor who met this requirement. It is a tribute to the current status of medicine that of this group all but six are still in active practice.



OBITUARIES

DR. ROSE D. BASS

Dr. Rose D. Bass died on April 15 at the age of 50 at her home in East Orange.

Dr. Bass was a graduate of the Woman's Medical College of Pennsylvania in 1926. She was in charge of the venereal diseases section of the Newark Department of Health clinic for 15 years before her retirement in 1943. She was a member of the staff of the Newark Beth Israel Hospital and organized the Maternal Health Clinic in Plainfield as well as a Maternal Health Center in Newark. She was a member of the New Jersey Branch of the American Medical Women's Association.

DR. CHARLES R. D'AMATO

Dr. Charles R. D'Amato died at his home in Rutherford on June 5 at the age of 42.

Dr. D'Amato was born in Carlstadt and was a graduate of the Georgetown University School of Medicine, class of 1936. He had practiced in East Rutherford since 1937 and served as the school physician for that community. He was a veteran of World War II and a member of the staff of Hackensack Hospital.

DR. J. GEORGE FEMAN

Dr. J. George Feman of Keansburg died on June 9 in Memorial Hospital, New York City.

Dr. Feman was born in Brooklyn in 1905, and was graduated from the University of Maryland Medical School, Baltimore in 1930. He served his internship and residency at Mercy Hospital, Baltimore, following which he practiced medicine in Keansburg. He was on the staff of Monmouth Memorial and Riverview Hospitals. He was active in civic affairs and was a member of many fraternal organizations.

DR. BROWNE MORGAN

Dr. Browne Morgan of Bloomfield died at the age of 79 on May 27.

Dr. Morgan was born in Jersey City and was graduated from the College of Physicians and Surgeons (Columbia), New York in 1898. He practiced in Bloomfield for 30 years before his retirement in 1938. He was a member of the staff of the Newark Eye and Ear Infirmary and the Academy of Medicine of Northern New Jersey.

DR. WALTER W. SCHMIDT

Dr. Walter W. Schmidt of Cliffside Park died on June 7 at Englewood Hospital at the age of 62.

Dr. Schmidt was born in New York City and was a graduate of New York University School of Medicine (1912). He practiced medicine for 37 years in Cliffside Park and was a member of its Board of Health for more than 25 years. He was also Chief of Medicine at Englewood Hospital.

WOMAN'S AUXILIARY

1953 CONVENTION NOTES

Mrs. Stuart Z. Hawkes, Chairman, Press and Publicity

The 26th Annual Meeting of The Woman's Auxiliary was held on May 17, at Haddon Hall, Atlantic City. Registration opened on Monday, May 18, and the pre-convention board meeting was held that afternoon, followed by a tea in honor of Mrs. Ralph Eusden, President of The Woman's Auxiliary to The American Medical Association.

Mrs. Edward H. Dyer, President of the Auxiliary, presided over the general session on Tuesday. The session opened with an invocation by Dr. H. E. Sheehan and the auxiliary loyalty pledge, led by Mrs. Thomas H. McGlade. A welcoming speech to the membership was made by Mrs. F. Rolfe Westney, president of the Atlantic Auxiliary, and responded to by Mrs. Frank S. Forte of Newark, president-elect of the state auxiliary. A memorial service for departed members was conducted by Mrs. William E. Dodd.

A luncheon was held honoring Mrs. Dyer, with Mrs. David B. Allman as toastmistress. Dr. Harrold A. Murray stated that the Auxiliary is the greatest help that the Medical Society has in its public relations. He stressed that the Auxiliary has the opportunity to mold opinions in the right direction. Dr. Murray presented gold keys to the living past-presidents of the state auxiliary. The guest speaker was Mrs. Eusden who said that the basic object of the Auxiliary, to cultivate friendly relations and to promote mutual understanding among physicians' families, was as paramount as ever but that our real theme is a "Better World." Mrs. Eusden placed emphasis on the American Medical Education Foundation and said that every physician should help repay the cost of his own tuition by contributing to the medical schools through the Foundation.

During the afternoon session officers were elected. Mrs. Forte was installed as president.

Mrs. Frank S. Forte presided at the inaugural breakfast which was held on May 20. The incoming President of The Medical Society of New Jersey, Dr. Henry B. Decker, was guest of honor. Dr. Decker spoke briefly on his experiences during thirty years of teaching medical students.

Following Dr. Decker, Mrs. Thomas Delaney, Executive Director of the Homemaker Service of Essex County gave a five minute talk on the establishment of a Homemaker Service and its importance for long term illnesses.

Mrs. Forte called attention to the national and state outlines and their usefulness to the county auxiliaries. She also emphasized the importance of the handbook for all auxiliary workers. An invitation was extended to all members of the Auxiliary to attend the state meetings which are held in Trenton.

Mrs. Forte made the following suggestions to the county presidents:

1) Include the president-elect when you invite the president to visit your county meetings. 2) Set up agenda for your meetings to facilitate their running smoothly. The state parlimentarian will be glad to assist you in this phase of Auxiliary procedure. 3) It is important to read all material sent out by the state chairman. Discuss the material at board meetings before launching any program. Discuss it with your Medical Advisory Committee and they will help you decide what is pertinent for your community. 4) No member may represent the Auxiliary in any organization, until she has written authorization from the Medical Advisory Committee. 5) The Auxiliary does not engage in any political venture. 6) List state meetings, public relations meetings and convention dates in your county program booklets.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Gifford's Textbook of Ophthalmology. By Francis Heed Adler, Prof. of Ophthalmology, University of Pennsylvania Medical School. 5th ed. Pp. 488. Phila., W. B. Saunders Co., 1953. ($7.50)

This edition of one of the most widely used textbooks on the subject for the undergraduate medical student and the general practitioner is the second appearing under Dr. Adler's direction. It shows considerable improvement over the preceding one in that much irrelevant material has been deleted or abbreviated. As examples of this greater selectivity we would point to the abbreviated discussion of ocular motility and to the considerably reduced material on the technical aspects of special ophthalmologic examinations. While Dr. Adler retains the discussion on the indications for surgery, he wisely dropped the details of surgical technic.

Material on light and vision has been added as have numerous and better illustrations. The section on medical ophthalmology has been increased. This reviewer admires especially the presentation of the material on hypertensive diseases and diabetes.

As a reference and as a textbook, this edition is highly recommended. It is also an excellent book for the general practitioner who wishes some information regarding particular eye disorders. Portions make good reading for the experienced ophthalmologist. Especially valuable are the sections on therapeutic agents used in ophthalmology and those dealing with ocular diseases caused by diseases of the central nervous system and ocular manifestations of general disease.

I. V. Berney, M.D.

Health of Workers in Chromate Producing Industry. Prepared under the direction of W. M. Gafaler, D. Sc. (Public Health Service Publication No. 192) Washington, D.C., U. S. Government Printing Office, 1953. Pp. 131. (50 cents)

Based on investigations conducted in six plants in New Jersey, Maryland, Ohio and New York concerned with the manufacture of chromates and bichromates from chromite ore, this publication presents in detail the industrial processes involved and their medical aspects.

After an introductory review of the literature, a complete description of the manufacturing process itself is presented. Next, environmental studies are followed by a report of dust control measures, and an actuarial accounting of morbidity and mortality among workers in this industry. The latter half of the book describes a careful medical survey with an extensive discussion of the pathogenetic action of chromate on the organ systems of the body.

Chromate workers show a statistical predilection for bronchiogenic carcinoma, the incidence among such workers being roughly 50 times that in a control population. This is by far the greatest hazard facing such employees. A high incidence of nasal perforation in exposed workers was found, as was conjunctival congestion, and severely red throats. Pulmonary fibrosis was not a feature of chromate exposure, but bilateral hilar enlargements were observed. The incidence of dental caries, hypertension, and cardiovascular diseases did not seem to be affected, nor were any unusual hematologic abnormalities found. Red and white cells and casts were found in the urinary sediment somewhat more frequently than in the average industrial population, and urinary coproporphyrins were within normal limits.

As a model of careful research in industrial medicine this book is outstanding. A four-page insert contains six illustrations in color and several chest roentgenograms. Those concerned with industrial medicine will find this monograph enlightening, as will chest physicians interested in pneumoconioses and their relation to pulmonary neoplasia.

R. D. Goodman, M.D

Contributions to the Etiology, Therapy and Prophylaxis of Schizophrenia. By Julius Steinfeld, M.D. Des Plaines, Illinois, 1953, Forest Press. pp. 31. ($1.00)

The "regressive" character of schizophrenia is well known, and it is presumed that some kind of trauma has either fixed the patient's development at a very primitive level or that a later trauma caused him to shrink from growing up and led him back into a more comfortable, very early childhood stage. In some respects this stage is almost vegetative, which suggests that the primal trauma must have occurred prior to ego development. Thus the trauma can never be recalled, and in a sense it cannot be relived. Probably this accounts for the resistance which schizophrenics characteristically show to psychotherapy.

So much is standard psychiatric theory. Steinfeld takes it from there. He reviews the similarity between acidosis in infants and the psychosomatic status of schizophrenics. He fits in the role of the diencephalon. He notes the appearance of "acid bodies" in the blood during shock therapy, and suggests that this procedure might exert its healing effect through repeating the otherwise inaccessible primal trauma. The characteristic carbohydrate disturbances of schizophrenics are then restated. This, in turn is fitted into the special role of the mother as the feeder of the infant, with both somatic and emotional components. The entire hypothetical fabric is then woven together to present a well integrated theory of the cause, prevention and treatment of schizophrenia. The doctrine is further illuminated by recital of histories in eleven cases, which illustrates the etiologic or therapeutic theories of the author. In all, a stimulating, soberly reasoned and thought-provoking little brochure.

Herbert Boehm, M.D.

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI August, 1953 No. 8

ENERGY COSTS OF VARIOUS PHYSICAL ACTIVITIES IN RELATION TO PULMONARY TUBERCULOSIS

By Edward E. Gordon, M.D., Archives of Physical Medicine, April, 1952.

In the management of pulmonary tuberculosis, the question often arises as to how much physical activity a given patient may assume and yet safely avoid stress with possible reactivation of his disease. Precise definition of the limit between tolerance and stress is not possible, for neither are the relevant factors fully understood nor are measurements feasible. However, the intensity of physiological work, that is, the energy expended in the performance of a task, can be obtained. While this method does not reveal the working capacity of an individual, it has the following advantages: (1) the degree of cardiovascular response roughly parallels the intensity of work in terms of energy expenditure; (2) respiratory responses are easily determined with the measurement of work intensity. Thus, a rough index of the magnitude of cardio-respiratory stress imposed upon a patient is afforded by a determination of the work intensity of a given task. The intensity of energy expenditure is measured in terms of oxygen consumption per minute. On this basis energy costs of some common activities were determined to provide the clinician with a knowledge of their general orders of magnitude. This knowledge in conjunction with the clinical data could serve as a guide in judging the wisdom of allowing a patient to engage in an activity when apparently indicated on clinical grounds.

As a preliminary study to ascertain whether different individuals would display equivalent results in performing a given task, mainly healthy subjects were tested. Nine normal female and four normal male subjects were used; as the investigation progressed, four male patients on ambulatory status were included in the study. These exhibited no impairment of pulmonary function and presented the usual criteria of apparently arrested disease for four to six months. Such subjects probably afforded values for working energy cost comparable to those for healthy subjects, since they were on an ambulatory status and in a better state of physical fitness than clinically active patients. No comparison was made between healthy subjects and patients, as the latter comprised too small a group.

Fifty-three experiments were carried out with the normal group and five with patients. Tasks selected were those applicable to patients either on a modified bed-rest program or on limited ambulation. Since the rate of work influences the energy expenditure, it was controlled whenever possible; otherwise the optimum tempo for the individual was allowed.

This work is concerned only with the intensity of the rates of energy cost of various activities and not with the total daily energy expenditure. It is believed that the factor of intensity is as important as the total sum, since a short burst of relatively high energy cost may be injurious to the tuberculous patient by exceeding a critical level above which physiological stress may cause pathologic changes. For example, a physician rightly hesitates to allow showering for patients still in a dubious clinical status; the four or five minutes of activity is insignificant in the total daily expenditure, yet the high intensity of physiological stress engendered even briefly casts doubt on the wisdom of allowing it. A knowledge of the intensity levels of energy costs may contribute to the final judgment regarding the prescription of certain activi-

ties for a patient. A compilation of energy costs is presented, therefore, in which appear observations from these experiments and those reported in the literature. In the table are grouped values for activities of daily living and for work therapy.

The levels of energy cost assigned to the activities studied may err on the low side. A majority of the subjects were normal, healthy individuals, who

Energy Cost of Self-Care and Work Activities

Activities	*Per cent rise above the basic metabolic rate*	*Source*
Sitting	17-25	Harvard Fatigue Laboratory, Orr
Standing relaxed	38	Harvard Fatigue Laboratory
Conversation	38	Harvard Fatigue Laboratory
Dressing and undressing	43-53	Sherman, Brody, et al.
Personal toilet	38	Harvard Fatigue Laboratory
Showering	242-377	Author
Eating a meal	38	Harvard Fatigue Laboratory
Writing a letter	75	Harvard Fatigue Laboratory
Writing a letter	20	Author, Kestner, et al.
Strolling	75	Harvard Fatigue Laboratory
Walking slowly (2.6 m.p.h.)	160	Sherman
Using wheel chair (1.2 m.p.h.)	138	Author
Walking moderately fast (3.75 m.p.h.)	290	Sherman
Walking downstairs	320	Sherman
Walking upstairs	1330	Sherman
Hand sewing	40	Sherman
Knitting (23 stitches/min., sweater)	50	Sherman
Making link belt (reclining):		
stiff leather (4 links/3 min.)	39	Author
soft leather (4 links/3 min.)	27	Author
Leather tooling (reclining)	24	Author
Leather punching and lacing (reclining)	22	Author
Chip carving (reclining)	45	Author
Copper tooling (sitting)	41	Author
Weaving—hand loom (2 operations/min.)	50	Author
Weaving—floor loom (2 operations/min.)	99	Author
Chisel carving (sitting)	122	Author
Tailoring	75-105	Sherman, Farkas, et al.
Typing	20-50	Kestner, et al.
Typing rapidly	82	Sherman
Bookbinding, light	56-92	Kestner, et al.
Bookbinding, partly heavy	105-120	Sherman, Kestner, et al.
Wood work on sanding lathe	119	Author

were trained in the tasks performed. This might have operated to give results lower than those attained by patients newly assigned to physical activity. However, since work is contraindicated for acutely ill patients, and the tasks utilized can be quickly learned, it is probable that the patients would closely approximate the values obtained in this study.

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			Duodenal	Jejunal	Stomal	Gastric	Good	Fair	Poor	No Report			Complete	Moderate	None	No Report
Grimson, Lyons, Reeves	100	100	93	7			80	11	4		5		47		19	29
Friedman	15	15	14			1	5		4	6[3]			2			13
Bechgaard, Nielsen, Bang, Gruelund, Tobiassen	26	26	21			5	16	4	6				8	6	12	
McHardy, Browne, Edwards, Marek, Ward	162		162				136	12	11		3	1	14	9	7	129
Segal, Friedman, Watson	34	34	34[4]				14	13			7	2	5		8	14
Brown, Collins	117	99	117				97	7	8		5	8	55	9	8	40
Asher	77		65		7	5	52	9	16			16		9	21	47
Rodriguez de la Vega, Reyes Diaz	5	4	5				4		1					3	2	
Winkelstein	116	116	102	8		6	102		14				53		18	45
Hall, Hornisher, Weeks	18	18	18				11		1	6[5]			18			
Maier, Meili	38	38	24			14[6]	27	7	4[7]				10	2	5	21
Meyer, Jarman	25	18	25				21		4							25
Poth, Fromm	37	37	37				33	3	1				33	3	1	
Plummer, Burke, Williams	41	41	41				36		5				38		3	
McDonough, O'Neil	104	100	104				63	10	31			11	4		11	89
Broders	60	60	58		1	1	35	19	6				10	1	49[8]	
Legerton, Texter, Ruffin	11		11				11									11
Holoubek, Holoubek, Langford	76	69	76				35	27	10		4	10	26		10	36
Ogborn	42		39	2		1	42[9]									42
Shaiken	48	48	48				33	10	3		2		33	10	3	
Johnston	145	145	145				143		2			2	143		2	
Rossett, Knox, Stephenson	146		141			5	146					4[10]	53			93
TOTALS	1443	968	1380	17	8	38	1142	132	131	12	26	54	552	52	179	634
PERCENTAGES		67.8	95.6	1.2	0.6	2.6	81.3	9.4	9.3			3.7	70.5	6.6	22.9	

1. Not included in tabulations.
2. Included in "Relief of Symptoms" as "Poor" and in "Evidence of Healing" as "None."
3. Four had no symptoms when Banthine therapy was begun.
4. Of which seven were penetrative lesions and five partially obstructive.
5. No symptoms were present in four.
6. Two with symptoms only; no demonstrable ulcer.
7. Three were psychopathic patients and one had a ventricular ulcer of the lesser curvature.
8. Roentgen findings after treatment period of two weeks; forty-seven had duodenal deformity.
9. All returned to work within a week.
10. In these four, after relief of symptoms, Banthine was discontinued because of urinary retention.

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Sunday the 13th	HALL OF FAME PROGRAM	8 P.M.	Sert Room
Monday the 14th	FILM FORUM	8 P.M.	Empire Room
Tuesday the 15th	FORUM ON PHARMACOLOGY IN SURGERY	8 P.M.	Empire Room
Tuesday 15th and Wednesday 16th	MEETING, OPERATING ROOM NURSES	9:30 A.M.	Empire Room
Wednesday the 16th	ANNUAL BANQUET	7 P.M.	Grand Ballroom
Thursday the 17th	MEETING, OPERATING ROOM NURSES	9:30 A.M.	Le Perroquet Suite
Thursday the 17th	LUNCHEON AND FASHION SHOW, AUSPICES OF LADIES AUXILIARY, THE INTERNATIONAL COLLEGE OF SURGEONS	12:30 P.M.	Empire Room
	CONVOCATION	7 P.M.	Carnegie Hall

ASSEMBLY PROGRAM

MONDAY (morning)—Advances in the Treatment of Cancer
(afternoon)—Demonstration: A Rehabilitation Team in Action and Advances in Surgery of the Aged

TUESDAY (all day)—Advances in Treatment of Diseases of the Heart and Lungs

WEDNESDAY (morning)—Advances in Thyroid Surgery and Intervertebral Disc Surgery
(afternoon)—Advances in Surgery of Stomach and Intestines

THURSDAY (morning)—Advances in Surgical Treatment of Diseases of the Esophagus and Medical and Surgical Treatment of Diseases of the Lung
(afternoon)—Advances in Vascular Surgery

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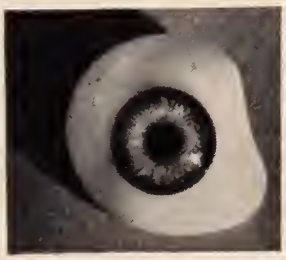
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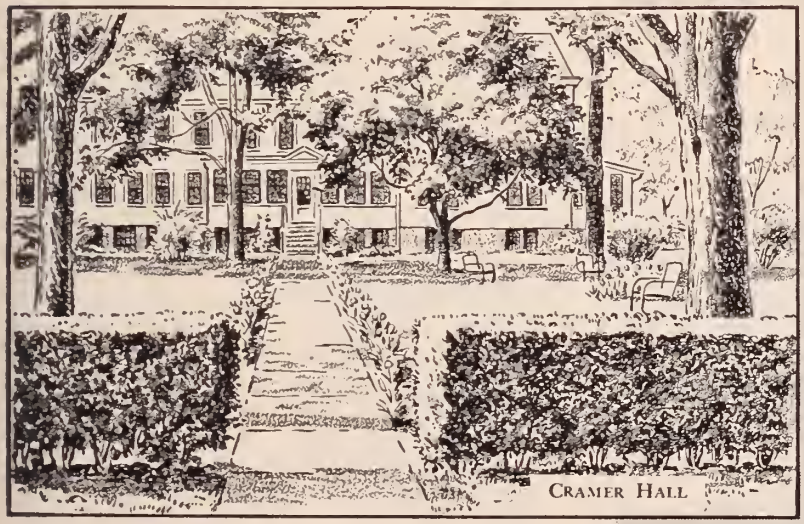
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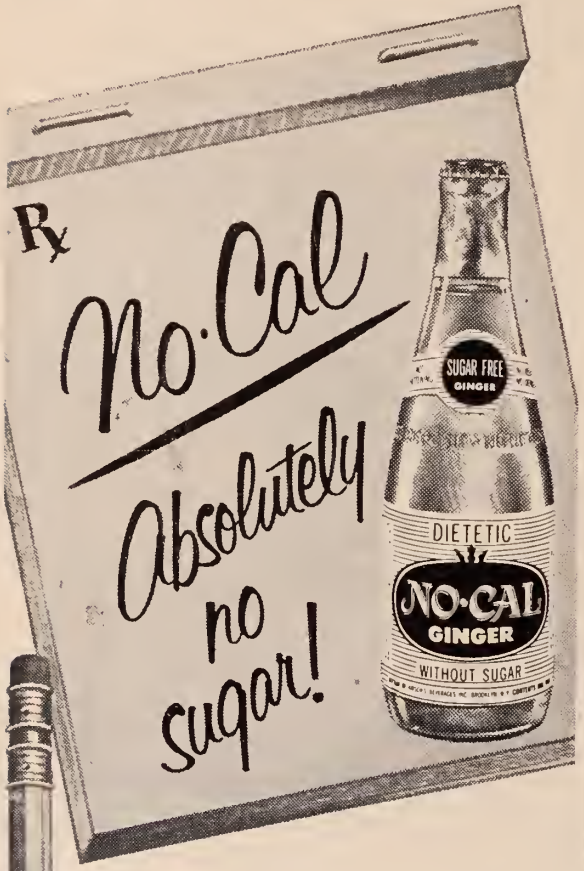


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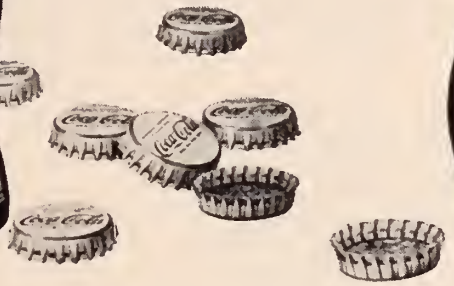
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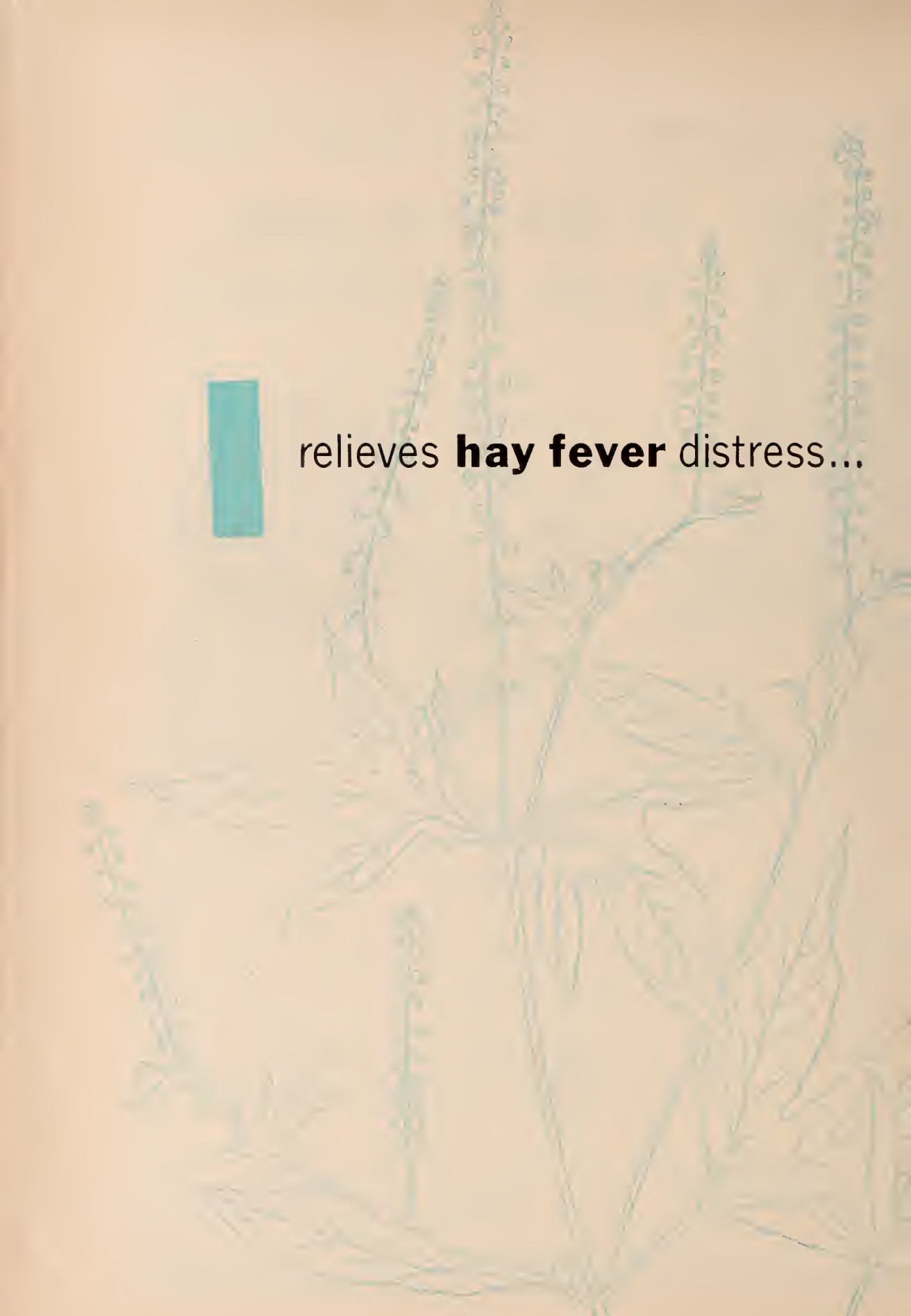


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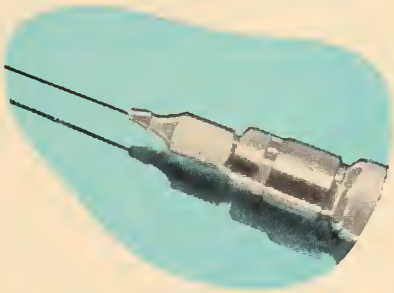

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CONTENTS—Pages 363 to 442

EDITORIALS— Page

FIFTIETH ANNIVERSARY ISSUE 363

[illegible] IS A COMFORTABLE JOURNAL 366

ORIGINAL ARTICLES—

ROLL CALL OF THE EDITORS 368

PUBLIC RELATIONS A NEW OLD CONCEPT—Richard I. Nevin, Trenton, N. J. 370

CHANGE IN MEDICAL CARE—Edward W. Sprague, M.D., Newark, N. J. 371

A HALF CENTURY OF MEDICINE—George H. Lathrope, M.D., Morristown, N. J. 377

FIFTY YEARS OF SURGICAL PROGRESS—David B. Allman, M.D., Atlantic City, N. J. 382

THE HISTORY OF THE NEW JERSEY GASTRO-ENTEROLOGICAL SOCIETY—Julius Gerendasy, M.D., Elizabeth, N. J. 386

ADVANCES IN MATERNAL WELFARE 1903-1953—Hammell P. Shipps, M.D., Camden, N. J. 391

THE MILITARY ROLE OF NEW JERSEY PHYSICIANS IN THE PAST FIFTY YEARS—Henry A. Erdkin, M.D., Newark, N. J. 394

THE MOTHER'S MILK BANK OF ESSEX COUNTY—Theodore A. Murray, M.D., Newark, N. J. 401

ORIGINAL ARTICLES— Page

CHANGES IN OTOLARYNGOLOGY IN THE PAST FIFTY YEARS—Henry B. Orton, M.D., Newark, N. J. 404

FIFTY YEARS OF PHARMACOLOGY—Rowland D. Goodman, 2d, M.D., Trenton, N. J. 405

NEW JERSEY'S CONTRIBUTION TO PSYCHIATRIC PROGRESS—George S. Stevenson, M.D., New York, N. Y. 412

FIFTY YEARS OF PROGRESS IN PUBLIC HEALTH—Daniel Bergsma, M.D., Trenton, N. J. 417

REHABILITATION IN NEW JERSEY—Henry H. Kessler, M.D., Newark, N. J. 423

FIFTY YEARS OF UROLOGY: A REVIEW—C. R. O'Crowley, M.D., Newark, N. J. 427

A HISTORY OF THE WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF NEW JERSEY—Mrs. William E. Dodd, Beach Haven, N. J. 430

ROBERT MCKEAN, FIRST PRESIDENT OF THE MEDICAL SOCIETY OF NEW JERSEY—Fred B. Rogers, M.D., Trenton, N. J. 432

ANNOUNCEMENTS 438

BOOK REVIEWS 439

TUBERCULOSIS ABSTRACTS 441

Roster of Officers and Committees, Advertising Pages 3A-7A

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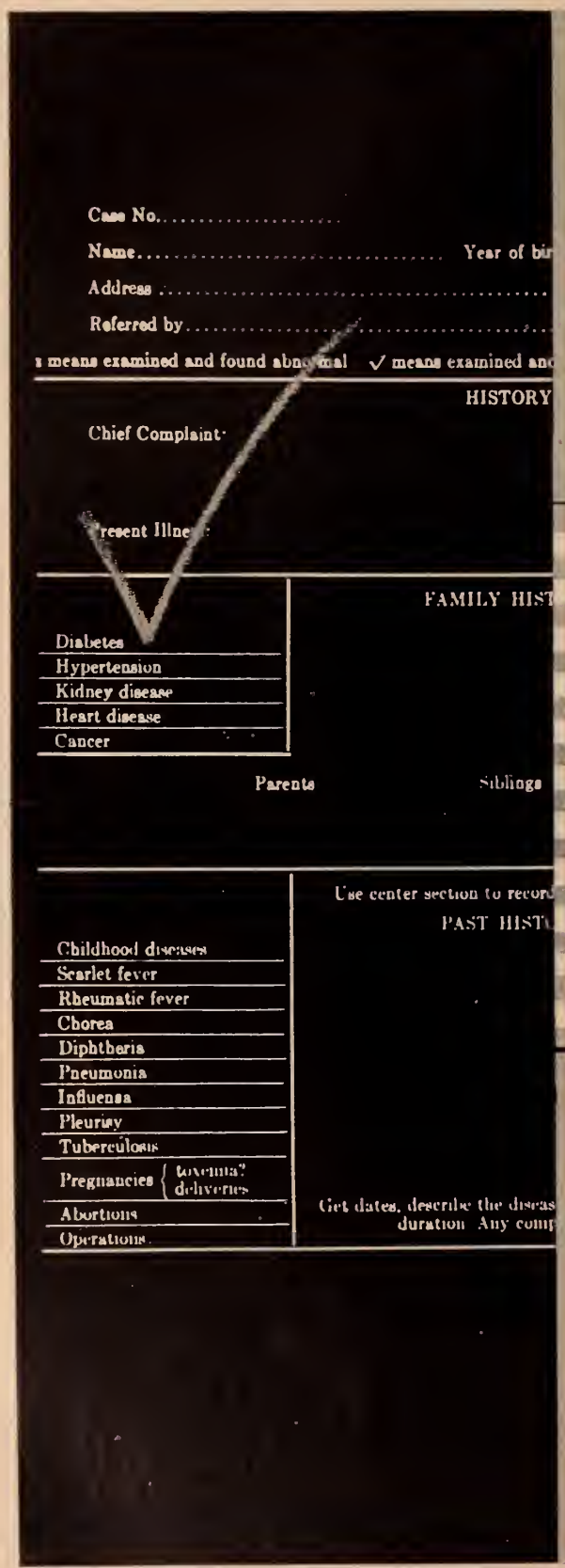
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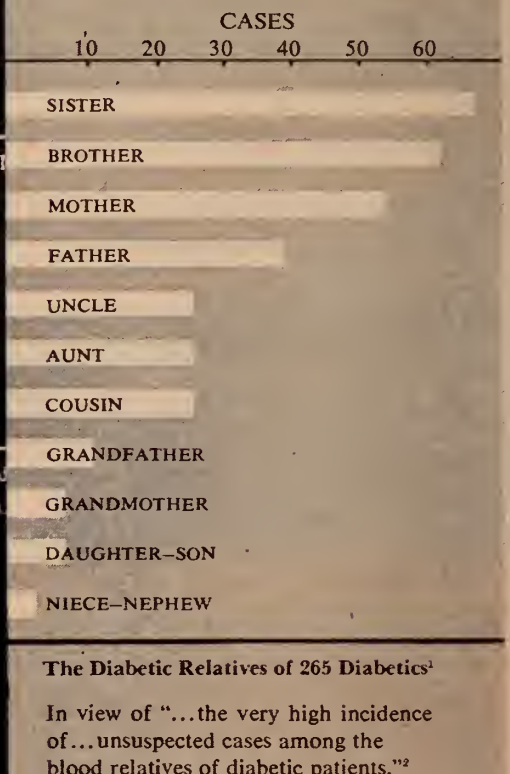
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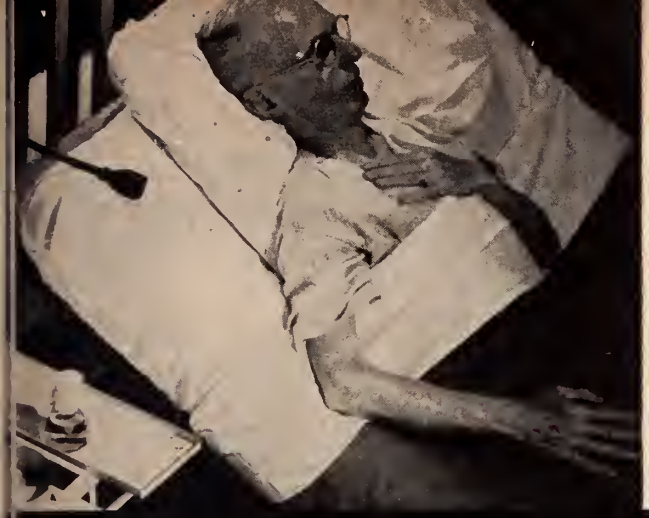
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1. Barach, J. H.: Diabetes and Its Treatment, New York, Oxford University Press, 1949, p. 38.
2. Allen, F. M.: Diabetes Mellitus, in Piersol, G. M., and Bortz, E. L.: Cyclopedia of Medicine, Surgery, Specialties, Philadelphia, F. A. Davis Company, 1951, vol. 4, p. 505.

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1. Ferguson, C., and Miller, C. D.: J. Urol. *67*:762 (May) 1952.
2. Trafton, H. M., and Lind, H. E.: Ibid. *69*:315 (Feb.) 1953.
3. Blahey, P. R.: Canad. M. A. J. *66*:151 (Feb.) 1952.

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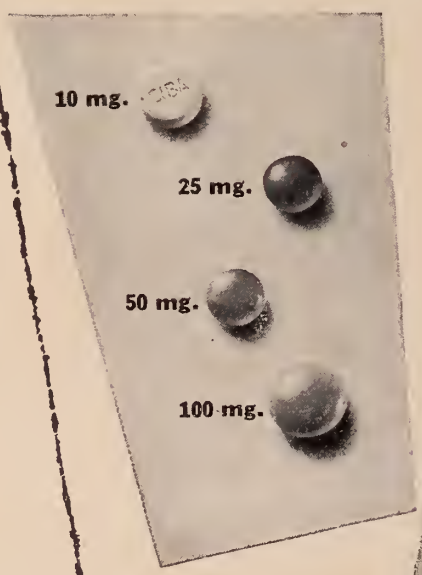
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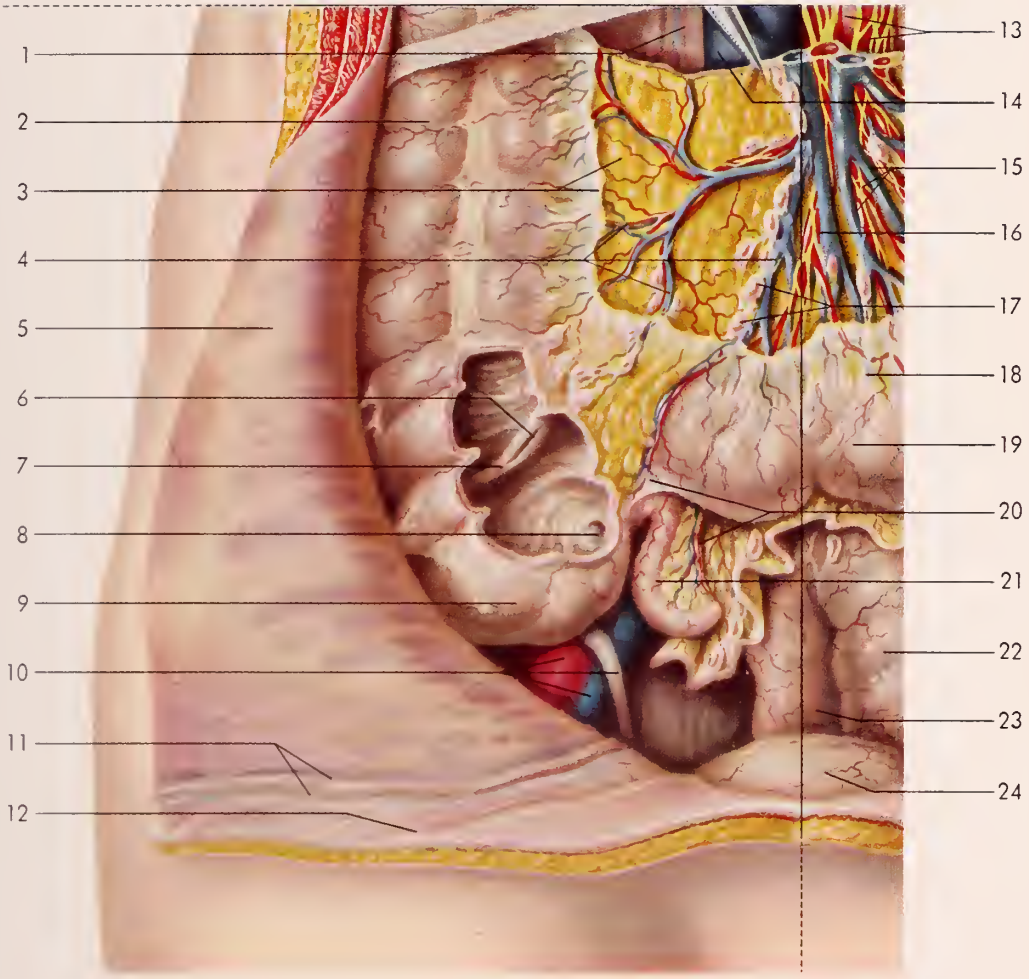
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11 Epigastric artery and vein
12 Lateral umbilical ligament
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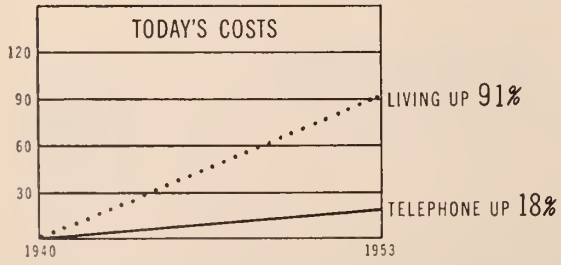
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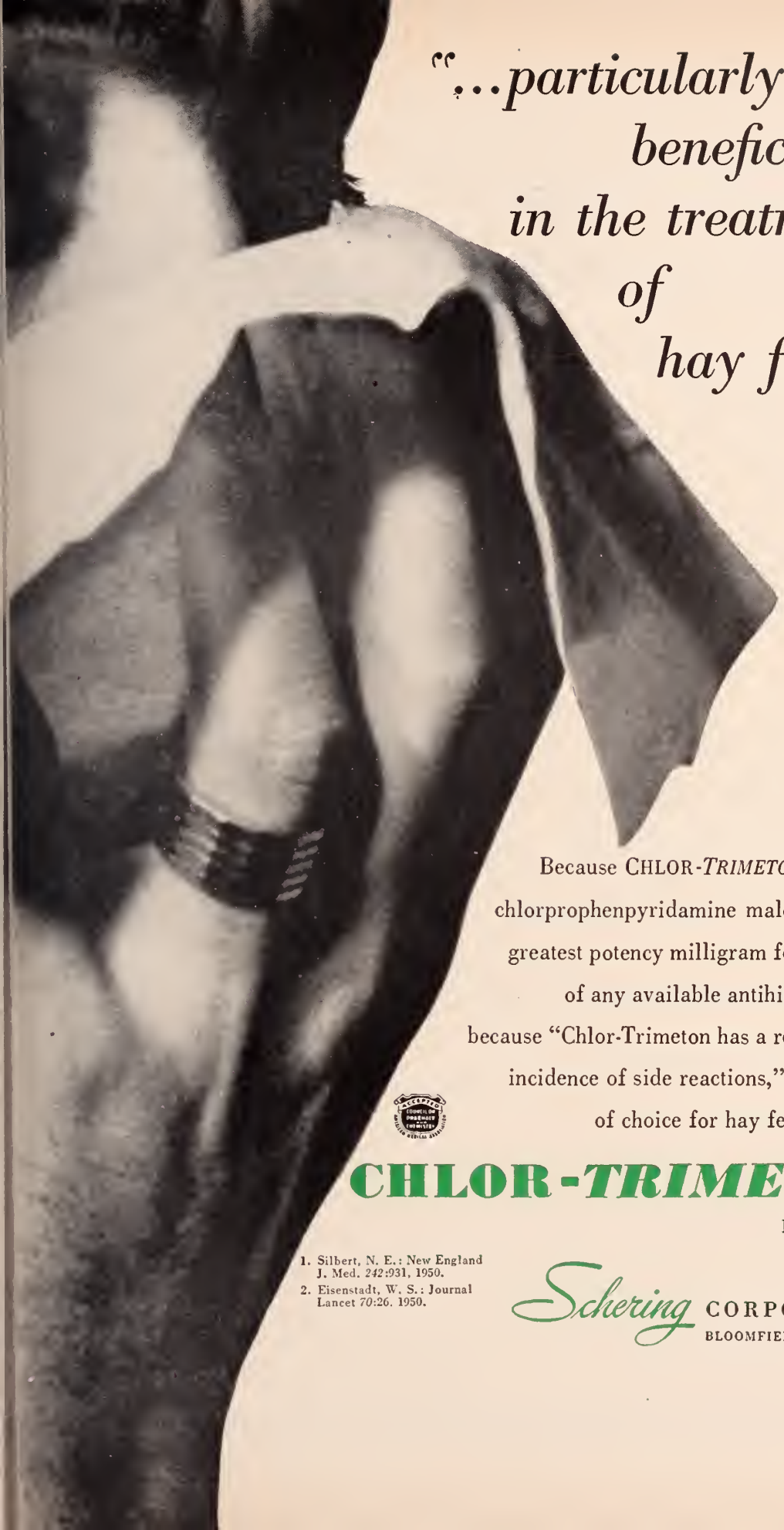
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1. Silbert, N. E.: New England J. Med. *242*:931, 1950.
2. Eisenstadt, W. S.: Journal Lancet *70*:26. 1950.

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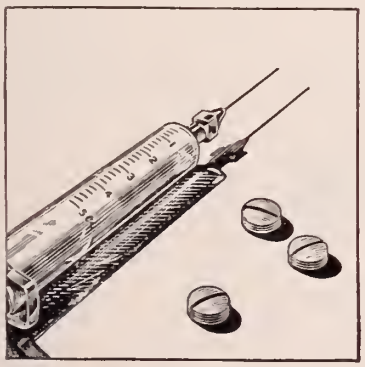
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1. Moyer, J. H., et al.: Am. J. M. Sc. *225*:379 (April) 1953.
2. Mills, L. C., and Moyer, J. H.: A.M.A. Arch. Int. Med. *90*:587 (Nov.) 1952.
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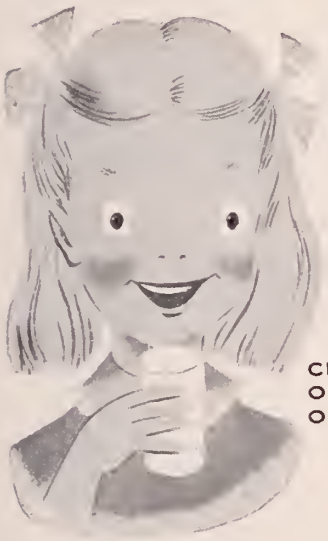
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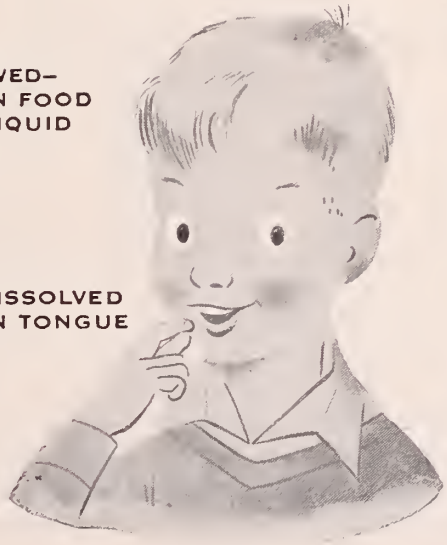
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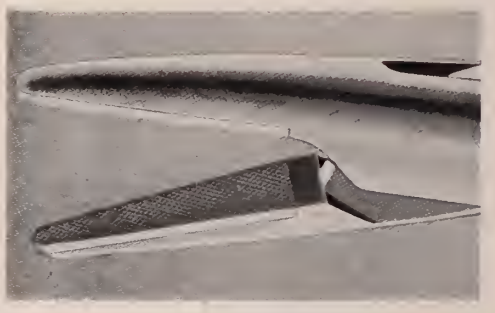
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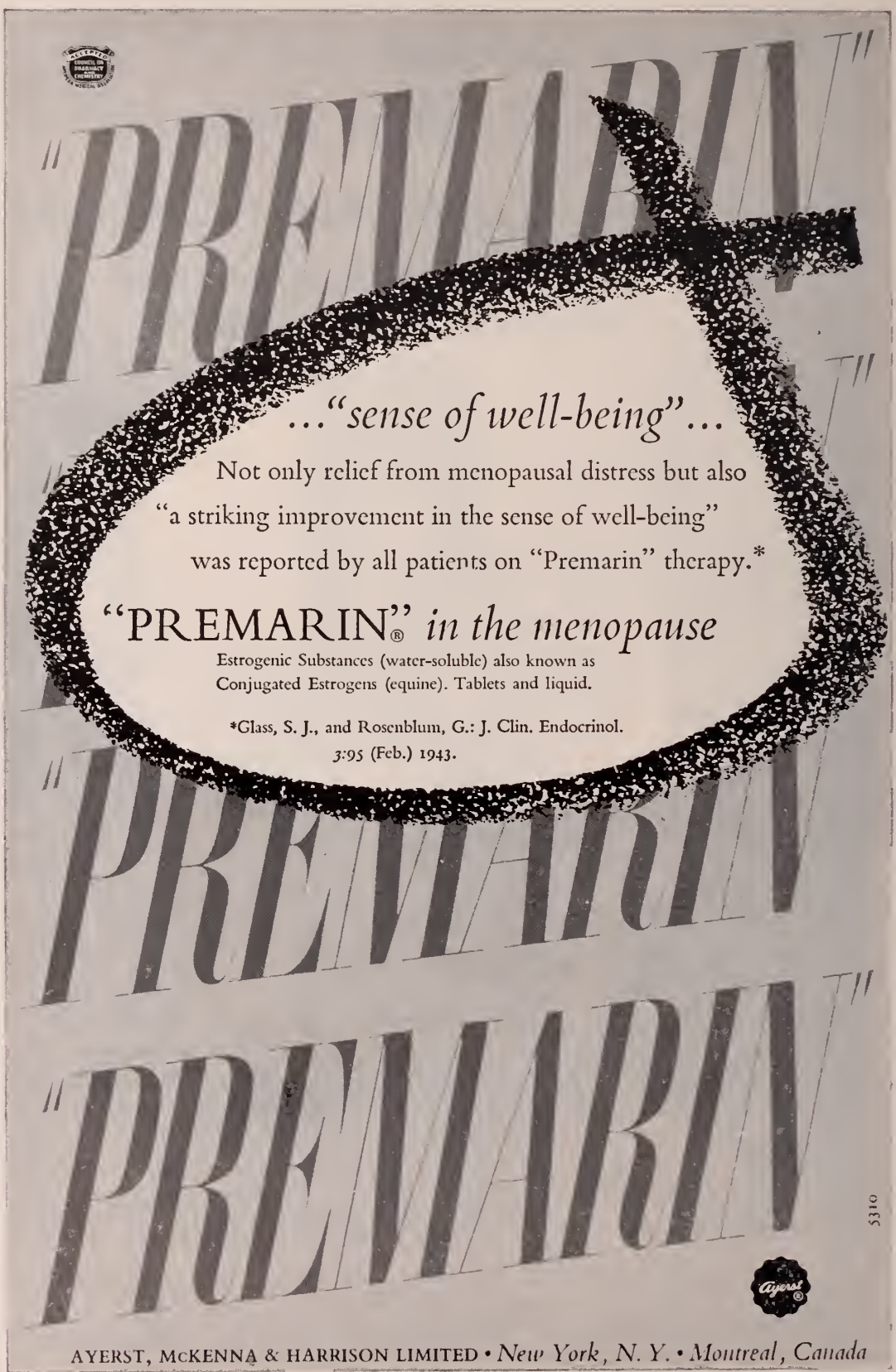
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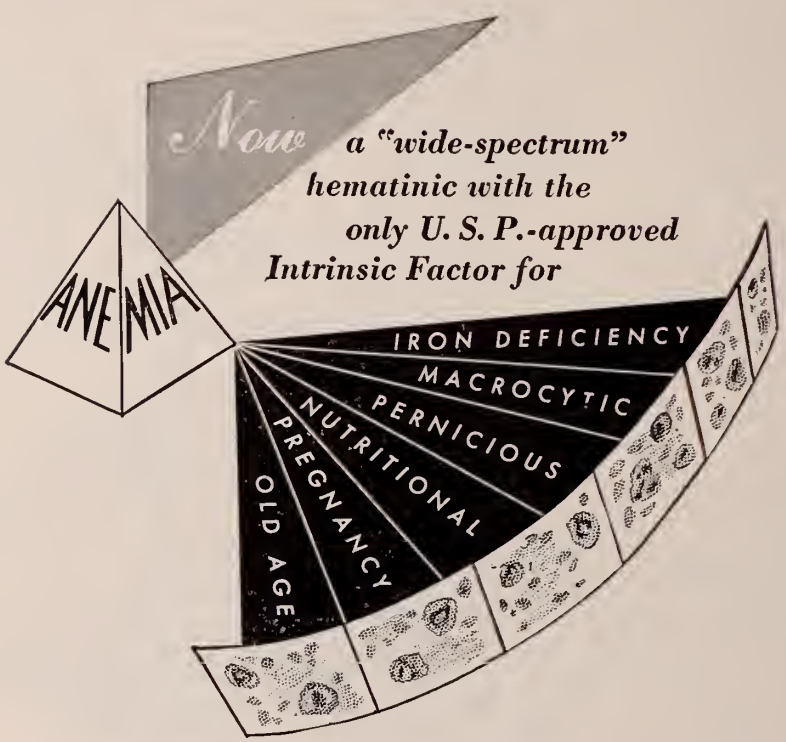
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Meat...

and the Diet after 50

Although caloric needs in the later decades of life lessen with decreasing physical activity and diminishing metabolic rate, clinical observations[1] corroborated by experimental studies[2] show that protein needs of the aging organism continue at the levels of adequacy in earlier years.[3] For avoidance of protein deficiencies, which the aged are prone to develop,[4] the protein quota of the diet of persons over fifty should be more liberal than is often the practice.[5] In providing this quota, lean meat may well be one of the protein foods of the daily diet.

In the years beyond fifty, as well as before, continuous adequate protein nutrition remains an absolute necessity for maintenance of a normal concentration of plasma proteins and, in turn, a normal osmotic pressure of the plasma.[6] Even more pronounced in the aged than in younger persons are the ill consequences of hypoproteinemia—edema, decreased resistance to generalized infection, retarded bone healing, and poor wound healing.[7] Furthermore, dietary protein is essential for the continuous chemical regeneration of cell protein in the prevention of abnormal tissue wasting, one of the most characteristic and obvious changes in the geriatric patient.[8]

But meat is much more than an outstanding protective protein food in the dietary of persons over fifty. It also supplies generous amounts of the B group of vitamins and of iron, phosphorus, and other essential minerals. In the well-balanced diet of the later years of life, meat is just as important for the maintenance of nutritional and physiologic well-being as it is during the earlier years of life.

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occasional incorrigible exception)
take it without a struggle.
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like it, too.

taste-tested
well tolerated
clinically effective



Formula:

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Dosage:

15 pounds—1/2 teaspoonful every six hours
30 pounds—1 teaspoonful every six hours
60 pounds—2 teaspoonfuls every six hours

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FIFTIETH ANNIVERSARY ISSUE

With this issue THE JOURNAL of The Medical Society of New Jersey celebrates the start of its fiftieth year of publication. Volume 1, Number 1 appeared in September 1904, following the action of the Board of Trustees on July 6, 1904, which established a medical journal for the members of this society. To quote from the first page of the first volume of our JOURNAL:

> The Board of Trustees, at a meeting held July 6, 1904, unanimously decided in favor of issuing a monthly journal to be called "The Journal of The Medical Society of New Jersey," and the management and control of the same was placed in the hands of the Publication Committee, according to the provisions of the constitution and by-laws of the Society.

Thus THE JOURNAL began life, under the direction of its first editor, Dr. Richard C. Newton of Montclair.

Into what sort of a world did the men of 1904 deliver this lusty infant? The United States had emerged from the Spanish-American War as a colonial power, having wrested the Philippines and Cuba from the Spanish. It was the era of Theodore Roosevelt, whose dynamic personality dominated the scene from his accession to the presidency in September, 1901, following the assassination of McKinley. The industrial revolution of the previous century came of age, and the individual tycoons of the country included such men as Carnegie, Rockefeller, Depew, Mellon and Armour, while J. P. Morgan and Edward Harriman were struggling for financial ascendency. In 1903 Henry Ford began the mass production of automobiles. In May 1902, a strike by the anthracite mine workers of eastern Pennsylvania began; it ended in October of that year only through the personal intervention of Roosevelt—the first time in history that a President used his influence to settle a strike.

In October 1903, the Republic of Panama declared its independence from Colombia, and

in November of the same year the United States acquired the Canal Zone. The next ten years saw the conquest of malaria in the Zone, and the Canal was opened to shipping in 1914.

On the world scene, Russia and Japan became involved in a war which was settled by Roosevelt at Portsmouth in 1905. Russia suffered a setback, and the way was paved for the growth of Japanese imperialism that was not destroyed until the close of World War II.

This was also the era of William Randolph Hearst, whose newspaper empire achieved unprecedented magnitude, but whose political ambitions ended with a brief 2-year term in Congress.

Socialism was the order of the day for persons with liberal leanings; the Industrial Workers of the World organized rebellious units in Paterson, and other industrial centers. Upton Sinclair, 28 years old in 1906, was the most famous among the "muckrakers", and his book "The Jungle", aroused the irate citizenry to demand political and economic reforms.

New Jersey, strategically located between the huge metropolitan centers of New York and Philadelphia, expanded and prospered. In spite of the tremendous industrialization that occurred after the Civil War, New Jersey's agriculture kept pace, and even today our state is fourth in acreage planted to truck crops. In 1950 New Jersey's net farm income per acre led the nation. New Jersey's seashore became a mecca for vacationers as a result of the development of railroads after the Civil War.

In 1903 Edison's plant produced a 500-foot movie entitled "The Life of an American Fireman." For "The Great Train Robber" a train was borrowed from the Lackawanna Railroad and action took place near Paterson at the High Bridge. In 1919 David Griffith had his headquarters at Singac. Among the stars who operated in that locale were Pearl White, Marion Davies, the Gish sisters, Francis X. Bushman, and many others. The background was considered especially fine for westerns, and the Passaic River was frequently filled with canoes of ferocious Indians!

Industrial research made great strides in New Jersey in this period. Between 1868 and 1926 Edison patented more than 2000 inventions. Chemicals, communications, drugs, food, music, paint, plastics, soaps, ships, and petroleum products are only a few businesses in which research was active. By 1900 New Jersey had more railroad mileage in proportion to area than any other state in the union.

The turn of the century saw the growth of labor unions throughout the country, and New Jersey was an active center for this development. In 1905 the typographical unions took the lead in organizing the eight hour day. In one of the most bitter fights in labor history, the Newark union levied a 10 per cent assessment on its members to support the strike. The universal eight hour day was finally achieved in 1906. Passaic Valley, invaded by anarchists at the turn of the century, saw rioting, time bombs, and destruction of property. In 1911, New Jersey passed the first state employers' liability laws.

In the two decades from 1890 to 1910 New Jersey's population rose from 1,444,933 to 2,537,167, with the great immigrations from Europe led by the Germans and Irish.

Politically, New Jersey was under Republican domination from 1896 to 1910. At the time THE JOURNAL was founded, Franklin Murphy was governor. It was a time for "progressivism", a vague reform movement that had its effect in the passage of certain reform laws during this period. For example, in 1904 the minimum working age for boys was raised to 14, and in 1903 reclamation of the meadows between Jersey City and Newark was begun. The office of State Auditor was created in the same year, and the Department of Motor Vehicles in 1909. Woodrow Wilson was professor of political science and president of Princeton University during this period.

Newark, the state's largest city, had a population of 246,000 by the census of 1900. It was even then a major manufacturing center, with over 3000 plants within its 22 square miles. In 1903 Newark had nine public and private hospitals. The city hospital was described* as "the largest and finest hospital building in the State. It has accommodations for over 300 patients, is new and equipped with

the latest appliances, with fine training school and ambulance service." Other hospitals in existence at the time were St. Michael's, St. Barnabas, St. James, German (now the Clara Maass Memorial), Babies', Women's and Children's, Emergency, Eye and Ear Infirmary, and the Isolation Hospital, a branch of Newark City Hospital. The board of health was active and was "known far and wide for its progressive methods."

If this period in our history belonged politically to Teddy Roosevelt, medically it was the era of Osler. This world-famous physician, of humble Canadian origin, set the pattern of combining the art and science of medicine which has been followed to this day. Making his rounds in Baltimore, Philadelphia, New York, and London, he set an unparalleled example of the "complete" physician.

By 1904, The Medical Society of New Jersey, founded in 1766, had been in existence for well over a hundred years. Its early history has been described by Rogers† in a recent article in this JOURNAL. In 1790 a rival society was founded at Elizabethtown, but its brief career ended in 1807. In 1847 our Society joined the newly established American Medical Association. From 1859 to 1903, our publications were *The Reporter*, and the *Transactions*. In September 1904, the first issue of this JOURNAL appeared. In 1904 the President of the Society was Dr. Walter B. Johnson of Paterson, the annual meeting was held at the Hotel Chelsea in Atlantic City, and the Society's membership was 1183.

What were the topics of medical interest during the early days of our JOURNAL?

Infectious diseases virtually unknown today were among the principal medical problems of the era. Dr. H. W. Elmer of Bridgeton published an article entitled "Some of the Channels Through Which Recent Investigations Have Proved Typhoid Fever may be Transmitted." Contaminated water, milk, and raw shellfish were blamed. Thomas H. Harvey of Orange, in November 1904, presented a comprehensive review of the symptomatology of appendicitis. In December 1904, Dr. John A. Wyeth of New York described boiling water as a treatment for angiomata. The question of cardiac stimulants was considered by Dr. W. Blair Stewart of Atlantic City, who deplored the excessive use and abuses of strychnia.

Editorially THE JOURNAL was concerned with child labor in New Jersey, the illegal practice of medicine in the state, and the promiscuous advertising of patent medicines. An editorial in February 1905, dealt humorously with the question of spitting in trolley cars. It was suggested that the capacity of trolleys be limited to half the usual number so that "the passengers be permitted to expectorate freely in every direction." In March 1905, osteopathy was an issue, and physicians in every part of the state were urged to unite in preventing passage of a law "which will virtually license them to practice medicine in this state."

Fifty years ago is within memory of persons alive today. It is remarkable, however, that there are physicians still active who were members of our Society when this JOURNAL first saw light of day. Add fifty years to the time it takes for one to go through medical school and internship, and the venerability of these our elders becomes apparent. The following list of "charter readers" will attest to the longevity of New Jersey's physicians—eloquent proof of the healthy atmosphere of our state!

David B. Ackley
William H. Areson
Angelo R. Bianchi
Stella S. Bradford
Fletcher F. Carman
David R. Crounse
Maximillian Danzis
Harry B. Epstein
Charles H. Finke
Frank Freeland
Francis H. Glazebrook
E. Zeh Hawkes
George J. Holmes
Ernest G. Hummel
A. Dunbar Hutchinson
Harry W. Ingling
J. Eugenia Jaques
Otto Lowy
Joseph A. Maclay
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George W. Muttart
Charles B. Neal
William Petry
Charles H. Purdy
Robert C. Ribbans
John J. Ritter
Frederick W. Sell
Frederic H. Seward
Milton A. Shangle
Frederick G. Shaul
Elbert S. Sherman
Harry B. Slocum
George N. J. Sommer
Ira T. Spencer
Edwin Steiner
Harold A. Tarbell
Charles E. Teeter
Rolland D. Tomlinson
George T. Tracy
Andrew B. Vanderbeek
William L. Vroom
Charles H. Waters
Charles W. Wilson
John H. Winslow

The contents of this issue of The Journal are devoted entirely to commemorating its fiftieth year of active life. On the advice of several members of the Board of Trustees, a group of well-known and qualified members of the Society were requested to prepare articles for this special event. The enthusiastic response of the authors was especially gratifying, and their cooperation is typical of the spirit which pervades our organization.

The first article, by our former editor, Henry Davidson, tells of the men who were responsible for the publication of The Journal throughout the years. Mr. Nevin, our capable executive officer, next reminds us of the newness, yet agelessness of public relations. There then follow papers which describe the progress that has been made in various fields and specialties of medicine, with particular attention being given to New Jersey's contributions during the past fifty years. No attempt has been made to include every specialty, the goal was rather to depict a cross-section of New Jersey's medical growth.

Finally, Dr. Fred Rogers provides an interesting biography of our first president, casting light on the type of man who molded our Society in its early years.

The editor wishes to take a moment more of the reader's time to thank some of the many persons who have made this issue a reality. To the Board of Trustees and the Publication Committee, for their support and advice, to each individual contributor, to the advertisers and publisher, to the headquarters staff in Trenton, and especially to Mrs. Miriam Armstrong, our grateful thanks are due.

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OURS IS A COMFORTABLE JOURNAL

Henry A. Davidson, M.D.,* Arlington, Va.

Fifty years is a respectable age for an American medical journal. Most of the state journals are our juniors. During the half-century, medical journalism has undergone a significant change. But The Journal of The Medical Society of New Jersey has not changed as much as many similar periodicals. In general orientation, to a considerable extent in internal make-up, and to an astonishing degree in format, this Journal has remained stable during the entire fifty year period. The plain yellow cover, for instance, has been a trademark for five decades. Every once in a while some one pleads for a brighter color—or for a varicolored cover—or for a more streamlined type design on the cover. And the Publication Committee debates it, and then decides that the old-fashioned but functional cover which has made our Journal recognizable from a distance during all these years should remain. When the Committee distributes samples of a proposed new cover design, there are many "ohs" and "ahs." The modernistic design is attractive, the proposed new cover has a fresh and up-to-date look. But then the same observers begin to feel uncomfortable about it. There is a sense of security in the old cover. It is familiar, and effective; in its own way it is distinctive; and if it is homely, it is also homey. And so it stays on.

Similarly the general orientation of The Journal shows a stubborn longevity. It is a magazine for family doctors and it makes no pretensions. It does not hold itself out as a textbook of advanced specialty medicine. It

* Dr. Davidson was editor of this Journal from 1941 to 1952. He was an editorial consultant for a few months thereafter, and is now Chief of the Program and Planning Section of the Psychiatry Division of the Veterans Administration in its central office in Washington, D. C.

does not boast of being the medium through which epoch-making discoveries are first made known to a breathlessly waiting medical world. It is published in a state which has no medical school, and therefore it has not become a showcase for theses of professors or their brilliant students. Modern medical research *is* conducted in New Jersey, but generally such research is either affiliated with a medical school, or finds its outlet in highly specialized journals. Consequently the producers of major research projects do not seek out our JOURNAL as their prime vehicle; and in truth, THE JOURNAL does not seek out the creators of basic research either. For this is a practitioner's book, and basic research—though a vital ingredient in medical progress—does not, in its first yieldings, help the practitioner very much.

THE JOURNAL is—unashamedly—a house organ. It is the organ of a large medical society. It is the channel through which the leaders of the society communicate with the members. And it offers a sounding board for members who wish to communicate with the officers. It tells the story of the organization itself—its committees and trustees, its component societies, its auxiliary, its cooperating agencies, its Annual Meeting and its special events. These features do not make a journal a quoted organ of nationwide significance, since most of these organizational items are of local interest only. But that is one of the major functions of THE JOURNAL—and it always has been. It is a camera which records the local medical scene, a mirror which reflects it, a medium which communicates it.

So it is that the principles on which this JOURNAL were founded have remained its guide-lines even today. This is not to say that the changing face of medical science has left THE JOURNAL in a turn-of-the-century back water. The newest developments in modern medicine are recorded here as swiftly as experience confirms their validity. But always the touchstone is how useful and not how new is the idea.

There are those who think of this JOURNAL as being conservative, perhaps even stodgy. In its 1904 dress, its simple functional type-design, its plain black-and-white lay-out, its caution about giving space to radically new medical procedures, its detailed reporting of internal organizational matters, in all these things, it may indeed seem to be unspectacular. It is, perhaps, something like an old shoe. It may not be beautiful to look at it; but it is comfortable to work with, and it carries its load solidly. This is its mission and this it will accomplish.

HUDSON COUNTY REPORT*

Dr. Calvin F. Kyte, Reporter, Jersey City

Hudson County is an ideal health resort. There were no deaths in the Society and fewer deaths among our patients than ever before (1899 excepted). The saving of three thousand lives in 1903 is due doubtless to a better water supply and to greater skill and more advanced methods in the treatment of patients. The usual meetings of the Society have been held during the year and the following papers were read and discussed: "Practical Points in Hernias," by Dr. Frank D. Gray; "The Puerperal Uterus," by Dr. Henry Suloreff; "A Diagnostic Symptom of Cranial Syphilis, with Prognosis and Treatment," by Dr. W. B. Pritchard, of New York City; "Comparative Value of Different Methods of Temperature Determination," by Dr. Charles L. De Merritt; "Diet in Health and Disease," by Dr. Calvin F. Kyte; "Aconitin; Its Action and Uses," by Dr. Henry D. Abbott. At the April meeting Dr. H. J. Bogardus exhibited a case of unilateral congenital dislocation of the hip, treated by the Lorenz method of bloodless reduction. The membership of last year, 148, has been increased by one. Four new members were elected and three withdrew. No member of the Society has died during the year.

* Annual Reports from the County Societies—1903-'04. J. M. Soc. New Jersey 1:257, April, 1905.

ORIGINAL ARTICLES

ROLL CALL OF THE EDITORS

Since its inception, this JOURNAL has had a total of seven editors. One of them served 4 months, and the current editor was appointed this year. Thus, only 5 editors guided its destinies for 49 out of its 50 years; a remarkable record of editorial stability.

1904 - 1906. Dr. Richard C. Newton of Montclair. A distinguished internist at the turn of the century, Dr. Newton was THE JOURNAL'S first editor. He was born nine years *before* the start of the Civil War, served for a decade as a medical officer in the Regular Army, and was active in state public health work. A true Victorian gentleman, he was scholarly, polished, and profound. He laid down the basic principles which have molded THE JOURNAL ever since. Dr. Newton died in 1919.

1906 - 1924. Dr. David Combs English of New Brunswick. For eighteen years, Dr. English edited this JOURNAL. He had one of the longest tenures of any editor in the history of medical journalism. Since his was the hand that guided THE JOURNAL for 18 of its first 20 years, he naturally left a permanent imprint upon it. He was born in 1841 when John Tyler was President of the United States, and he died in 1924, at the age of 83. His life span stretched from the days of Henry Clay to the era of Calvin Coolidge. He died in harness, for he was editor of this JOURNAL to the day of his death. Three days before his death he had drawn up a vigorous plan for THE JOURNAL year, September 1924 to August 1925. He held practically every office a devoted membership could confer upon him in county and state medical societies. He was the prototype of the family doctor, the kind that evoked the love of the community. His scientific equipment would seem meager by 1953 standards, but he gave his patients a faith, a warmth, a devotion and a solicitude that carried with it those healing powers that only such emotions can bring. One wonders if they make them that way any more.

1924 - 1933. Dr. Henry O. Reik of Atlantic City. Dr. Reik was the first of the professional editors to serve THE JOURNAL. His predecessors had been clinicians, rather than administrators or editors. They were skillful editors by virtue of the fact that they had enjoyed a well-rounded, highly literate, education of the nineteenth century scholar, when every truly educated gentleman was taught to use words with grace and precision. They were not, however, professional editors, still less professional administrators in the modern sense. Dr. Reik came to the Society as an administrator of medical societies, a developer of hospitals, and an editor of an international abstract service. He had written three books and had served as a medical corps colonel in World War I. In his service to this Society, he combined the duties of editor and executive secretary. He was the Society's first salaried executive officer as well as its first professional editor. Dr. Reik was born in 1868 and died in 1938.

1933 - 1934. Dr. Alfred E. Shipley of Brooklyn, N. Y. With a background of public health and medical administrative work. Dr. Shipley came to THE JOURNAL shortly after Dr. Reik's retirement. He was born in 1875 and when last heard of (1951) was still active in public health work in Brooklyn. He served as editor for only four months, resigning to accept a position in the New York City Hospital Administation.

1934 - 1941. Dr. Frank Overton of Patchogue, Long Island. After serving for a decade as editor of the distinguished *New York State Journal of Medicine,* Dr. Overton came to Trenton to take over the editorial chair of this JOURNAL in February 1934. Born in 1867, Dr. Overton was long noted as a medical editor, historian and writer. Medical history was one of his specialties, and he made numerous

original and valuable historical studies of the background of New Jersey medicine.

1941 - 1952. Dr. Henry A. Davidson of Flemington, N. J. Although his private practice was limited to psychiatry, Dr. Davidson had already embarked on a career in medical editing and writing before being appointed to the editorship of this JOURNAL. Dr. Davidson had, for a decade, edited the *Bulletin* of the state's largest county medical society, was a contributing editor of *Medical Economics,* a professional writer of medical abstracts for several publications and a contributor to a well known medical cyclopedia. He subsequently wrote two books, as well as a great many articles for both lay and professional magazines. He resigned as editor in October 1952 to accept an appointment as Chief of the Program Analysis and Planning Section of the Psychiatry Division in the Central Office of the Veterans Administration in Washington, D. C.

1952 - Dr. Rowland D. Goodman, 2d, of East Orange, N. J. was acting editor from October 1952 to May 1953 and has, since that date, been editor.

GASTRO-UTERINE DISEASE*

JOSEPH M. RECTOR, M.D., Jersey City, N. J.

Intricate may appear the underlying conditions which become responsible for the complex mass of symptoms referable to gastro-uterine disease; impassable may seem the barriers which surmount the attempt to unravel these pathological difficulties, yet how simple they all become when one systematically follows an investigation which is complete from beginning to end.

These poor creatures, the slaves of chronic gastric or uterine disease, cannot but attract our undivided attention and elicit our strongest aid as we see them coming to us in the resultant state of malnutrition and distress. The disease becomes still more pitiable when we are told of the many failures happening as the results of careless examinations, inattention and even the forgetfulness by some of the fact that there exists far reaching injury consequent upon the disturbance of the balance of sexual life.

That the female sex, as an entirety, suffers from one or more functional derangements of the organic body, is almost an axiom which is accepted as a fact. These simple departures from the normal state, though functional at first, mark the beginning of multiple and complex organic derangement ending at last in a severe pathological lesion.

Your patient complains of a feeling of unrest, a slight frontal or occipital headache, excessive fatigue upon ordinary exertion, loss of appetite, distaste for her accustomed food, continued sleepiness, dragging pains in her back, a sense of fullness in her pelvis, soreness in the calves of the legs, disordered or painful menstruation followed by persistent leucorrhoea, heaviness after meals, increasing until epigastric pain is her constant companion. She is losing in weight, her muscles become flabby, the adipose tissue has lost its stability, her rotundity of figure is a memory of the past.

Matters of interest to other women are causes of anxiety and peevishness to her; coldness of the extremities, hot and cold flashes, numbness and tingling of the hands and feet give her the first warnings that a miserable state of existence has become her lot, which, unless relieved will condemn her to chronic invalidism.

If we examine the woman, when her symptoms first appear, we may find a simple lacerated cervix uteri, a prolapse of one or both ovaries, a retrodeviated uterus, with or without adhesions binding down the organ or its adnexa. The uterus entire may be inflamed, or its endometrium alone diseased, a small fibroid may be felt upon the fundus, or in the posterior wall. The purulent discharge from the cervix, or the enlarged and tender tube, may tell us the story that an infection was the starting point of the disease. The epigastrium is tender over the stomach centre or along the greater curvature, percussion shows its enlargement, examination of its contents shows lack of synchronism in its action. Constipation and tympanitic enlargement of the abdomen mark the beginning of the gastric or intestinal indigestion.

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* J. M. Soc. New Jersey 1:227, April, 1905.

PUBLIC RELATIONS: A NEW OLD CONCEPT

RICHARD I. NEVIN,* Trenton, N. J.

The doctor who entered the practice of medicine fifty years ago has lived through an era of widespread and frequently wonderful change. At no time in the history of man—or of medicine—have such bountiful benefits been vouchsafed within a comparable brief period. The frontiers of knowledge have been thrust wide, and in the sphere of applied science and medical arts, during these golden half-a-hundred years, mankind has entered upon the promised land, for long and yearning previous ages only wistfully dreamed of. Curative and preventive medicine, anesthesia and surgery, like four great and kindly genii, have stalked the world and have been lavish with the gift of life.

So absorbed has he been in the cavalcade of scientific discovery and professional accomplishment, that the jubilarian practitioner of today might well be pardoned if he has failed to note a concomitant phenomenon — the development of public relations as a factor in medical practice. It wouldn't be surprising, if when you mentioned public relations to him, you drew a blank look. He might even say, "Public relations?—What's that?" (Then you might be surprised to discover how difficult it is to tell him.)

"Why . . . " your reply would probably be, "public relations is a relatively new science, which embraces the principles and procedures whereby, through sound service, an individual or an agency wins and retains appreciation and general esteem."

"What's new about that?" he may retort. "Good doctors have always made it a point to so live and act as to endear themselves to their patients and their fellow citizens. It's just a matter of personal integrity and professional responsibility. Same old virtues popping up under a new name—that's what it is." . . . And, of course, he's right.

In these fast-paced days of crowded scientific and business education and of staccato technologic procedures, there is little place in academic curricula and little time in the student's life for leisurely philosophic and humanitarian deliberations or indulgences. Sometimes in our perfervid pursuit of progress we have been a little like the Mad Hatter or the March Hare. In the days of rugged individualism and of the spirit of "the public-be-damned," business especially neglected its manners. In fact, it prided itself on its boorishness and made of ruthlessness a virtue. Nor did it take steps "to mend its manners" until, in Hamlet's phrase, those rude manners threatened to "mar its fortunes." Then public relations was born, and, in effect, good breeding and humane consideration went into business. Public relations is certainly a worthwhile component of business and professional life. It reflects credit upon all who employ it, unless their sole motive is economic reward. Then they are doing the right thing for the wrong reasons. But even that is better than not doing it at all.

Like the poor, public relations has always been with us, at least in informal guise, and for economic and social success—particularly in a free society—it will continue to be with us. In fact, as the need of the poor at once both induces and makes possible the charity of the well-to-do, so the need of those who cannot help themselves calls for and makes possible the distinguished and grateful service of those with the ability and the heart to serve. The appreciation and gratitude of the recipient are naturally in proportion to the worth and magnitude of the service rendered. Doctors should be happy to realize that there is no greater service than that which extends and enriches the lives of those who receive it. Those who give life deserve love. They are fools if they are content to seek and accept only money as adequate compensation. Good doctors have never been fools; good doctors never will be.

Men of worth—and the term is not synonymous with "men of wealth"—have always, consciously or unconsciously, in their lives embraced and exemplified the once familiar concept of *noblesse oblige*. That is, they have felt the obligation to be true, above all, to themselves. Tall men, they would not stoop, even to conquer. Good men and strong, they did not have to. Nor do we. Stooping, we lose the advantage of stature; our vision is shortened, and we cannot see to lead.

Public relations at best seeks to preserve and encourage standards of service that are consistently high. Its slogans and punch lines are merely today's syncopated versions of yesterday's *noblesse oblige*. And both public relations of today and yesterday's spirit of *noblesse oblige* are the somewhat mundane shadows of two celestial and shining truths: "As ye sow, ye shall reap" and "Do unto others as ye would others do to you" . . . Old ideas—all of them—and indispensable, for the peace and true profit of a single person or of an entire world.

* Executive Officer of The Medical Society of New Jersey.

315 West State Street

TRENDS IN MEDICAL CARE:
Medical Service Plans in New Jersey

Edward W. Sprague, M.D., Newark, N. J.

From the time of Hippocrates to the beginning of the last century little change took place in the practice of medicine. While medical knowledge was most meager in the early days, gradually new facts were discovered and added to the sum total. Up to the middle of the nineteenth century, treatment with few exceptions, was nonspecific. Then came the discovery of anesthesia, the development of more accurate pathology, the recognition of the role played by bacteria in causation of disease, antisepsis, antitoxins, et cetera. Thus, the turn of the century found medicine on an increasingly sound factual basis. In 1910, as a direct result of the Flexner Report, medical education took a long step forward and was placed on a more scientific footing—resulting in better training and increased knowledge of medicine by our physicians. Recently, numerous specific drugs and biologicals, accompanied by striking technical advances in medical diagnosis and operative surgery, have greatly increased the physician's efficacy and widened the horizon of medicine.

All this recent rapid evolution in medical science has perceptibly changed the attitude of people toward the physician. Whereas large numbers of people in former times showed an attitude of indifference, resulting in much self-neglect and self-medication, there is general evidence today of dependence upon the knowledge and practical accomplishments of the physician. He is now held in the highest esteem and is considered an authority in individual and public matters of health. Some refer to these times as the "Golden Age of Medicine." However, while the art and practice of medicine had not changed much over the past centuries, nevertheless, all during that period the fundamental principles of good practice were developing. Good patient-physician relationship was held to be necessary. This was founded upon the patient's respect for the physician and the physician's *personal interest* in the patient. Free choice of physician and free choice of patient were essential elements, and no third party entered into the relationship. Equally important, there was no compulsion in any phase of the practice. Thus, over a long period of time, the principles of good medical practice in which we firmly believe today have developed.

From time immemorial, physicians have cared for all, fortunate or unfortunate alike. By and large, they have given their best to each one who has sought their aid. The segment of population needing the charitable beneficence of the physician fluctuated with prevailing economic or epidemic conditions. At times it became an almost impossible burden, as in our recent economic depression.

Around the end of the last century, some European political leaders began to realize that there were certain civic responsibilities in medical care and public health problems. About this time, Bismarck, partly as a clever political move, instituted state medicine in Germany. All the traditional fundamentals of good medical practice were scrapped in that movement. An element of compulsion entered into the system and free choice of patient and physician was abandoned. To many, this appeared at first to be a step forward. However, our medical philosophers soon saw in that system of compulsion many inherent dangers to the medical welfare of the public as well as to the profession. Perhaps the one redeeming feature was compulsory postmortem examinations of hospital deaths.

The two recent world wars greatly accelerated our social revolution. While medicine is quite insensitive to minor change, it is affected by general major trends in our social life. Many of the ideas which occupy our time today were not given much thought by our grandfathers. One of the most serious trends is the ever increasing assumption by government of the responsibility of satisfying the material needs of the people. Another trend which we must recognize is that a large sector of our people has emerged as a strong force, expressed through powerful trade unions. These organizations are essential to the public welfare and have brought marked benefits to the worker and society as a whole. However, the very size of the unions carries inherent possibilities of concentrated power. If such power were directed to the furtherance of government promises of so-called security in the field of medical care through the socialization of medicine, it would be most unfortunate for both the patient and his physician. While some of the organized labor groups officially favor socialized medicine, it is my opinion that the majority of the rank

and file of the members prefer to solve their medical problems on the basis of voluntary private enterprise.

Lloyd George, following World War I, found England ripe for government paternalism in medical care and imposed socialization of medicine on a reluctant profession and a people uninformed as to its ultimate consequences. To the credit of the British profession, they have done their utmost to give the best medical care under a plan destructive to the most essential feature—the physician's *personal interest* in the patient. Even the British government is now realizing many of the shortcomings of the system and there is hope that changes may lead to better service to the patient and less non-medical work for the profession.

The British movement awakened and alarmed many of our socio-medical prophets. Warnings from all sides began to appear, one of which was that we must put our own house in order. Medical needs and their costs were rising rapidly, as was the value of medical care to the public. An aging population also was adding to the demand for medical care. President Hoover focused national attention on the problem by appointing a "Committee on the Costs of Medical Care." The majority and minority reports of this Committee are well known. The minority report, under the able leadership of Dr. Nathan B. Van Etten, states:

> It ought to be remembered that compulsory insurance will necessarily be subject to political control and that such control will inevitably destroy professional morale and ideals in medicine. Since a qualified and untrammelled medical profession is the only agency through which scientific medicine can be applied for the benefit of the people, it follows that any plan which destroys professional morale will bring disaster to the public.

This minority report, more than any other single event, further awakened a sleeping, self-complacent profession to the realization that so-called socialization of medicine was imminent unless physicians could meet the public's medical needs within the framework of private enterprise.

In the early thirties, the depression with its sad and devasting consequences appeared. That situation emphasized that society would always be grouped broadly into three classes from a medical needs standpoint:

1. Those wholly indigent.
2. The medically indigent, who are made wholly indigent at times of catastrophic illness. This group always constitutes a large segment of our population and fluctuates with the general economy.
3. Those able to pay for their medical needs.

Over the years physicians had managed to care for all patients in a fairly satisfactory manner under the old system. However, the depression now forced great numbers of people to become medically or wholly indigent against their will and pride. They found themselves suddenly unable to pay for needed services and were reluctant to ask aid from their already underpaid physicians. This was especially the situation in the blighted areas of our large cities. At this time the Emergency Relief Administration, with which we are all familiar, was developed and set in operation. This mechanism aided the patient in securing medical attention, for which his physician was paid a nominal fee, and the plan operated within the pattern of our principles of good medical practice. This plan served a most urgent need. The medical part of its operation in New Jersey was supervised most efficiently and satisfactorily to patient and physician by Dr. E. Zeh Hawkes and his subcommittees for The Medical Society of New Jersey.

The success of this emergency measure served to encourage some of our zealous officials who were interested in socialization of medical services to develop broad plans under which the government would assume more direct responsibilities in the provision of medical care. From this beginning point of socialized medicine, it would be an easy and almost imperceptible step for the government to assert that the key to all social happiness lay in more and more government participation and control in almost any field of human endeavor. Thus, a collective economy, rather than one based on free initiative and *personal interest*, could easily be "sold" to the public. Our medical prophets now saw an immediate danger to the welfare of our public in health matters if, as the first step in the federal program, socialization were permitted to creep into medical care. We owe much to our leaders, who had the perceptive vision to see the dangers ahead, and to all others in the ranks who have helped hold back this movement.

However, while socialization or political medicine did not prevail, the profession realized that the federal and state governments could no longer ignore the needs of people unable to provide themselves with adequate medical care. Therefore, it behooved the profession to set up its own private enterprise voluntary insurance systems at state levels in an effort to solve the problem of medical costs for the low and middle income groups. Also, the profession realized it must show its willingness to assist all levels of government to provide adequate medical care to the wholly indigent within the same pattern of free choice. Such a pat-

tern was developed in the "Farm Plan" of our Medical Service Administration, which cooperated with the Federal Farm Security Administration in assisting the low income farmer. It was carried over by the Medical Service Administration in the operation of the "Newark Plan," whereby the funds to pay for the medical care of the indigent are provided by the city of Newark, while the Plan is operated by the profession in consonance with our rules of sound practice. This is one of a very few such plans in the country. It began operating November 1, 1943. It was planned at a conference of Mr. Brady, a former commissioner of Newark; Dr. Craster, former city health officer; Mr. Malady, director of the Department of Public Welfare; the late Dr. Norman Scott, and myself.

The profession at last realized the serious challenge to its long established form of practice and set itself to meeting this challenge. Voluntary plans, utilizing the insurance principle by spreading individual catastrophic medical expenses among many, were already being tried out tentatively by medical societies in a few states and Canada on a small scale, and had been under consideration by the American Medical Association for some time.

Finally, the American Medical Association House of Delegates, on September 17, 1938, approved the report of the Reference Committee on "Consideration of National Health Programs," which set forth a conclusion that "voluntary indemnity insurance may assist many income groups to finance sickness costs without subsidy." This action gave approval for the organization of state medical society voluntary insurance plans. It was the starting signal for a great pioneering effort. In a matter of days the writer arranged a conference at the State Medical Society office with Dr. William J. Carrington, then President of our Society. The formation of a voluntary insurance plan was urged, in order to assist the low and middle income groups to meet catastrophic medical costs. It was felt that such a plan should be organized by and operated with the approval of The Medical Society of New Jersey. Dr. Carrington quickly approved the idea and in October 1938, he appointed a committee designated "A Committee for the Study of Medical Cost Insurance," to consider the advisability of establishing such a plan. This committee consisted of Drs. Thomas K. Lewis, E. Zeh Hawkes, Andrew F. McBride, Spencer Snedecor, LeRoy Wilkes and Edward W. Sprague, with Dr. Hilton S. Read as chairman. The Committee was aided by the late Dr. Roscoe Leland of the A.M.A. and Dr. Frederick E. Elliot of New York.

Two meetings were held in Newark. The Committee's report to the Board of Trustees of the State Society of December 4, 1938, is a matter of record. The Committee urged that a plan be developed and recommended that a planning committee be formed to investigate further and develop procedures for the formation of a satisfactory plan.

This planning committee was appointed in January, 1939, and consisted of Drs. George B. German, Elton W. Lance, William C. Rucker, and William H. Todd, with Dr. Sprague as chairman. This committee broadly outlined the ideas and aims of the profession, the needs of the public, and the necessary practical steps to be taken before setting up a satisfactory plan. It pointed out that enabling legislation would be required at the outset. The Planning Committee also recommended that a Founding Committee be appointed by the President and Trustees of the Society.

The Founding Committee, under the title of "Voluntary Health Committee," was appointed early in 1939 with Dr. Elton W. Lance as chairman. During the work of this committee, a most fortunate event occurred. In August 1939, Dr. Norman M. Scott, the executive assistant to The Medical Society of New Jersey, was assigned to work with the committee, first as acting secretary until August 1941, when he was named medical director of the Medical Service Plan. To him goes major credit for whatever has been accomplished. His concept of the public's needs and of the physicians' ideals and responsibilities, together with his indefatigable unselfish efforts, played a most important role in our fundamental planning, organization and operations. He served faithfully as medical director of the Medical Service Administration and trustee and medical director of The Medical-Surgical Plan until his untimely death on March 30, 1950.

It was the belief of the Founding Committee that any plan to be developed should embody the following general principles:

(1) The purpose was to develop a voluntary medical service insurance plan to meet the needs of the people, which would be both workable and salable, while preserving all the principles of good medical care.

(2) The plan should provide full service benefits to people of low and middle incomes.

(3) The premium should be within the ability of people in these income groups to pay, and the payments made to the physician should be at a fair average level for those groups.

(4) The income limit for service benefits should be such as to leave a considerable group of the population for whose care there would still be an area for private negotiation between patient and physician as to compensation for services rendered.

(5) All the general policies of the plan should be subject to approval by The Medical Society of New Jersey before being put into operation.

To accomplish the above, it was concluded that the following steps would have to be taken:

1. The Plan organization would have to be incorporated.
2. An enabling act would have to be passed by the state legislature and a charter granted.
3. The Plan would have to be approved and operated strictly under the Department of Banking and Insurance.
4. In order to fulfill the requirements of the Department of Banking and Insurance, one of which would be that subscribers of the Plan must have a wide choice of physicians, at least fifty-one per cent of the fully licensed physicians of the state of New Jersey would have to sign an agreement that they would render full service benefits under the terms of the subscriber's contract.
5. Provision would have to be made so that subscribers with incomes above the designated ceiling level would receive as an indemnity toward their medical expense the same amount as the fee paid to the physician who rendered full service benefits to those below the ceiling level.
6. A schedule of fees would have to be set up. In order to operate within the rules of the Department of Banking and Insurance, this step was the only recourse and was taken with great reluctance by the Committee. The fee schedule had to be approved by the State Society before the Committee could proceed. While the necessary approval was given, I am sure a number of our Society members loathed this regulation in the matter of fees and objected to the implied element of compulsion. However, this action had to be taken if we were to operate at all and thereby ward off the increasing threat of socialization.
7. In addition to the development of the voluntary insurance plan, the Committee conceived of forming an organization sponsored by the Medical Society which could develop and operate various plans. This idea led to the formation of The Medical Service Administration.

One of the Founding Committee's first accomplishments was the filing of the certificate of incorporation of the "Medical Service Plan of New Jersey" on July 13, 1939, under the existing laws governing non-profit corporations. The trustees named in the certificate were Drs. Lance, Carrington and Sprague. The witnesses who executed the certificate were Drs. E. Zeh Hawkes, W. G. Herrman, Edward W. Sprague, Elton W. Lance and J. Wallace Hurff. It was provided that "Dr. Norman Scott shall be the registered agent in charge."

At the start the Committee realized that we were going into the insurance business and must have sound actuarial guidance. Most fortunately, Mr. John S. Thompson, an outstanding, nationally-known actuary of the Mutual Benefit Life Insurance Company, kindly consented to assist us in this endeavor. That was in January, 1940, and he has given us through the years since then much of his time and strength without recompense. He has been an invaluable guide as our actuary, and has broad sympathetic understanding of our aims and problems. At his first meeting with us, the title, "The Medical Service Administration" was settled upon for our organization. In 1947, Mr. Thompson was made honorary member of The Medical Society of New Jersey, in recognition of his great contribution to the profession's endeavors in the field of voluntary medical care and insurance.

Another definite step taken after weeks of discussion with Mr. Albert Wall, our State Society legal counsel, was to reincorporate in February, 1940 as the "Medical Service Administration" with a more comprehensive scope of purpose in order that varied functions pertaining to the problem could be performed and various plans developed. As of March 19, 1940, The Board of Governors of the Medical Service Administration were Mr. George W. Merck, Mr. John S. Thompson, Colonel Joseph Bigley, Drs. Augustus S. Knight, William J. Carrington, William G. Herrman, Elton W. Lance and Edward W. Sprague. Dr. Norman M. Scott was the secretary. Later he was made medical director of the Medical Service Administration. After March, 1940 and prior to the midsummer of 1942, Drs. Thomas K. Lewis, Royal A. Schaaf, Harry N. Comando and Samuel A. Cosgrove were elected as governors of the Medical Service Administration. Their faithful attendance, their understanding and wise counsel were of great help.

After six drafts, the required special legislation was finally passed and the charter granted. All of our operations now came under the strict supervision of the Department of Banking and Insurance. We were now to be a special type of legal insurance organization sponsored by The Medical Society of New Jersey.

During the latter part of this period of development, we invited the Hospital Service Plan trustees to perform the mechanical operations for the Medical Service Plan and act as our sales agent when we were under way. This seemed a logical working association between these two somewhat similar organizations, operating in related fields of service.

The Medical Society continued to subsidize the Medical Service Administration in its various tentative plans. Efforts were made early in 1942, to present a comprehensive medical service plan to industry and the public. Unfortun-

ately, this medical service plan proved to be unsalable, and it seemed that our efforts had failed, to our great disappointment. At this point the governors of the Medical Service Administration realized certain changes had to be made. A new Plan was developed, one altogether separate from the Medical Service Administration, the Medical-Surgical Plan of New Jersey. An agreement with the Hospital Service Plan was signed in May 1942, whereby the Hospital Service Plan would perform the routine operations and act as our sales agency on a cost basis to be ascertained jointly and agreed to. The Hospital Service Plan has served us well and faithfully from the first day. We hope this helpful relationship will continue.

The original contract issued in 1942 by the Medical-Surgical Plan provided payment on a "service benefit" basis for any subscriber, regardless of income, provided he occupied semiprivate or ward accommodations in the hospital. This contract was superseded two years later by our 1944 Series contract which provided "service benefits" within an "income limit" of $2,000.00 for a single person, $2,500.00 for man and wife, plus $250.00 for each dependent under 18 years of age.

In 1947 and 1948, the House of Delegates of The Medical Society of New Jersey approved the outline of a revised subscription contract that was first issued in 1949. This is the subscription contract which is still in force, under which the Plan has grown from an enrollment of approximately a quarter million to more than a million persons.

The Medical-Surgical Plan, since its beginning in May, 1942, has been a successful and constantly growing organization. It has enabled thousands of patients to meet their catastrophic medical expenses while in the hospital.

Part of the success of the Medical-Surgical Plan has been due to its hard working Board of Trustees. Our first president, Dr. Elton W. Lance, saw us firmly on our way before the Trustees regretfully accepted his resignation on July 19, 1942. He was entering the armed services. Dr. Thomas K. Lewis was elected president to succeed Dr. Lance on July 19, 1952 and served with outstanding leadership until his death in 1949, when our present very competent president, Dr. Royal A. Schaaf, was elected. We have all seen the Medical-Surgical Plan flourish under his leadership.

Herewith is the list of the trustees of the Medical-Surgical Plan since its start—May, 1942. They have all made notable contributions toward the aims and accomplishments of the Plan:

Dr. William J. Carrington	1942-1943 (deceased)
Dr. Harry N. Comando	1942 - present
Dr. Augustus S. Knight	1942 - 1948 (deceased)
Dr. Elton W. Lance	1942 - 1951 (resigned
Dr. Thomas K. Lewis	1942 - 1949 (deceased)
Dr. Royal A. Schaaf	1942 - present
Dr. Norman M. Scott	1942 - 1950 (deceased)
Dr. Edward W. Sprague	1942 - present
Mr. John S. Thompson	1942 - present
Dr. Samuel A. Cosgrove	1942 - 1953 (resigned)
Dr. Theophilus H. Boysen	1944 - 1945 (deceased)
Dr. William E. Dodd	1944 - 1952 (resigned)
Dr. William K. Harryman	1944 - 1945 (resigned)
Dr. Rudolph C. Schretzmann	1945 - present
Dr. William F. Costello	1948 - present
Dr. Lewis W. Brown	1949 - present
Dr. Irving P. Borsher	1950 - present
Dr. Sigurd W. Johnsen	1950 - 1951 (resigned)
Dr. Reuben L. Sharp	1950 - 1951 (resigned)
Mr. Arthur W. Lunn	1951 - present
Dr. Thomas J. White	1951 - present
Dr. Charles W. Barkhorn	1952 - present
Dr. Patrick H. Corrigan	1952 - present
Mr. Carl K. Withers	1952 - present
Dr. Joseph P. Donnelly	1953 - present
Dr. Joseph M. Keating	1953 - present
Dr. Paul Mecray, Jr.	1953 - present

The trustees of the Plan are assisted by three advisers, who currently are:

Dr. Samuel A. Cosgrove
Dr. William E. Dodd
Dr. Elton W. Lance

Credit for much of the success of the Plan goes to its administration. Fortunately, Dr. Irving P. Borsher had been associated with Dr. Scott in this work as his assistant for several years prior to Dr. Scott's death in 1950. Dr. Borsher was then appointed medical director of the Medical Service Administration and medical director, executive vice-president and trustee of the Medical-Surgical Plan, to fill the vacancies caused by Dr. Scott's death. He has faithfully carried forward the concepts and sound operations of the Plan and has been ably assisted by Drs. Alfano and Mele as associate medical directors. From the earliest days, Mrs. Barbara Jennings has served as secretary to Dr. Scott and now to Dr. Borsher. Her long and excellent services are greatly appreciated. Also at this time, we wish to acknowledge the valuable services of Mrs. Marie Nugent, secretary for the Medical Service Administration. Lastly, we acknowledge the fine indispensable services of our most capable administrator, James E. Bryan, and much credit is due to the office associates and co-workers.

Thus, with the guiding philosophy of the medical profession; with the approval of basic policies by The Medical Society of New Jersey; with the expert actuarial experience of Mr.

Thompson; with the efforts of the trustees; with the cooperation and aid of Hospital Service Plan and the cooperation of our administrators, we have come a long way. More important, and above all, the useful future of the Medical-Surgical Plan depends entirely upon the willingness of the individual physician to render full service benefits for the established fees to the patient whose income is below a designated income level. The physician's attitude depends, in turn, upon the fairness of the Plan's payments and the reasonableness of its policies. The payments must be as fair as possible to all segments of the profession but they must be supported by a premium level which the subscriber can and will pay. Herein exists a delicate balance with three vital factors: the correct level of income ceiling, the fees paid, and the premium cost. If any one of these three is too far out of balance, the Plan may cease to exist.

The Plan needs the understanding and full participation of all our physicians. The profession organized the Plan and physicians have great opportunity for practical service, working through the Medical-Service Administration and the Medical-Surgical Plan.

The membership of the Board of Trustees of the Medical-Surgical Plan is composed very largely of physicians. This must necessarily be the case. The Medical-Surgical Plan is an effort of the medical profession to develop and offer a service, so to speak, which can be implemented only by physicians; also whatever direction or control may be required can only be accomplished successfully by physicians. Any appointment of lay members to the Board of Trustees must be with the sole purpose of filling a need of the Plan—not because the appointment would represent any group of people.

The permanent success of the Medical-Surgical Plan depends on how well we serve the public interest and assist the individual of modest income to meet the problems of medical costs. Success also depends on the confidence the public has in the integrity and purpose of our profession as expressed through the Plan.

Present day man must have certain indispensable medical services. If our people are to receive the highest quality of medical care, we believe that liberty of choice and absence of compulsion or government intervention are essential in any adequate and progressive system. The profession can and must meet the needs through voluntary prepayment plans. Otherwise a passing socialistic political philosophy may foist a system upon us whereby good patient-physician relationships would be unfortunately restricted and the fullest benefits of the accumulated technics and the scientific attainments from the time of Hippocrates might be lost to those needing them most.

86 Washington Street

THE TRAINED NURSE AND THE DOCTOR*

Edward J. Ill, M.D., Newark, N. J.
Third Vice-President, Medical Society of New Jersey

There is probably no innovation in the practice of medicine during the past thirty years, save the adoption of aseptic surgery, which has so altered conditions and has been of such great value as the creation of the trained nurse. We owe her much, and many a practitioner would not care to practice medicine without her help. After years of careful attention to the training of nurses, and the observation of their subsequent work, the writer has come to some conclusions which he thought might be enlarged upon by so able a body of men and women as those before him. By an exchange of opinion and the experience of his hearers he hopes to increase his own knowledge, for the benefit of those nurses whom he assists in their training. Anything which benefits the nurse in the sense of enhancing her efficiency must be of paramount interest to us and to those who trust their lives and bodily health in our hands. How far-reaching this assertion is can only be conjectured when we think how much the moral physical and mental well-being of mankind depends on the endeavors of our profession.

While the writer is no idealist, he believes that it is one of our duties to assist in the education of the people towards the making of the perfect man. In this endeavor every help should be cheerfully and thankfully accepted. The understanding, painstaking and conscientious nurse will be no mean factor in the work. But just as we educate her and just as we set an example so will she do her work. It will be wise to look for any fault in the nurse to ourselves first. In her education in the hospital she must find only models of neat, clean and conscientious doctors.

* J. M. Soc. New Jersey 2:36, August, 1905.

A HALF CENTURY OF MEDICINE

George H. Lathrope, M.D., Morristown, N. J.

As we congratulate The Journal on having attained its fiftieth summer, and likewise on having grown during that period both in stature and in grace, we may be permitted to hark back over the years to the turn of the century and attempt some comparison between then and now. There are some of us left who can recall the practice of medicine at that time.

The writer entered medical school in the last year of the nineteenth century and still recalls those days. The technical course, in the better medical schools, had just been extended from three years to four. Pathology and bacteriology were coming into their own. Osler was walking the wards in Montreal, later Philadelphia and Baltimore, spreading his shrewd observations, his common sense and his genial philosophy like a fertilizing rain on the fallow soil of medical culture. McBurney, a few years before the close of the century, had made his first famous "gridiron incision", thereby popularizing the operation for what had formerly been called "inflammation of the bowels." "Bobby" Weir was giving his Saturday afternoon matinees in the Sym's Operating Theater at Roosevelt Hospital. As he talked to the students, his white-cotton-gloved hands, originally sterile (his chief concession to the new fangled notion of asepsis), alternated from the brass railing of the operating floor to the operating field itself, much to the consternation and distress of his assistants who were doing the operation while he lectured. Welch at Hopkins and Prudden at Columbia were emphasizing and popularizing the study of pathology.

Beside these, other great names adorned the medical world, and bedside teaching was in its heyday. The young graduate in medicine, with or without a hospital internship, and duly licensed, as he still is, "to practice medicine and surgery," went out in the world to engage in general practice, prepared to take care of whatever might fall his lot. However, his weather eye was out for surgical cases: these were more dramatic and exciting, and reward by way of emolument and reputation was greater. The concept of *internal medicine* arose about this time and a few imaginative and venturesome graduates displayed their temerity by going into practice with the declared purpose of eschewing all surgery and making internal medicine a career. The surgeon as an avowed specialist began to appear, and announced that all surgery belonged to him. Yet, while he performed operations with his right hand his left was not denied the patient with bronchitis or typhoid fever.

Those who had access to the large hospitals with their better equipped laboratories had at their command diagnostic aids such as the blood count, urinalysis, stool examination, microscopic examination of smears to identify the tubercle and Klebs-Loeffler bacilli, the pneumococcus, gonococcus and meningococcus. Streptococci and staphylococci were distinguished by their growth on agar plates and other culture media, while Widal and Wassermann tests came into general use between 1905 and 1910. There was a clumsy x-ray machine useful for diagnosing little other than fractures and some foreign bodies. The country practitioner had available only the blood count and urine examination which he might perform himself or get some younger confrere to do for him. In his early days of practice (1910) the writer was given a urine specimen, but no other information, by a local practitioner. Having examined it, he called up the other doctor and reported his findings. Said the latter, "Well then, what's the diagnosis?" Such were the esoteric mysteries of the laboratory!

Those were truly horse and buggy days. The automobile was still scarce and regarded as hardly dependable. Hospitals were not generally available except in larger cities or wealthier rural centers, and surgery was not the special hospital procedure it is today. Indeed, more major surgery was done in the home than in hospitals. The surgeon brought his operating kit and his nurse, the kitchen table served as

an operating table, and the local practitioner, if he were not the operator himself (in that case one of his confreres) administered ether through a cone made of a folded newspaper swathed in a towel. In the hospitals the new Bennet inhaler was employed, which permitted first the administration of nitrous oxide followed by a change to ether.

The writer recalls giving, in his first year of practice, an anesthetic for one of these kitchen table operations. It was a curettage for incomplete abortion, and the operator, who was the leading medical man in a community of some 50,000, was using what he proudly displayed as "a new contraption." This was an irrigating curette which admitted a stream of bichloride of mercury solution into the cavity the curette was attacking. In the middle of the operation the flow of liquid antiseptic stopped. The operator, remarking, "it must be plugged," withdrew the curette, detached it from the rubber tubing, and, placing the proximal end of the curette in his mouth, blew lustily till he dislodged some clotted blood and detritus. With a sigh of relief he re-attached tube and curette and went on with the operation! Guarded inquiries during the next few weeks elicited no information of harm done!

During the second decade and up to the close of World War I laboratory methods and technics were slowly broadened. Cooke had opened up the vast field of allergy with his researches, and Cohn and Swift at the Rockefeller Institute had given new impetus to the study of heart disease and rheumatic fever. Then, after the war and throughout the twenties there was a large and relatively sudden crystallization of the new knowledge investigators had been acquiring. The x-ray's usefulness broadened both in diagnosis and therapy; blood chemistry came into common and fruitful employment; the studies of Du Bois and others brought forth the basal metabolism machine, and a better understanding of thyroid dyscrasias. The electrocardiogram also came into general use and widened our knowledge of heart disorders. Our hospitals for mental diseases took the first forward steps in recognizing that so-called mental ills were often dependent on physical ailments. New Jersey hospitals at Trenton and Greystone Park were among the foremost in making a thorough physical check of every patient and then taking the necessary corrective measures.

Banting produced his monumental work on insulin in the first part of the third decade, closely followed by Minot's announcement that liver would alleviate, perhaps cure, pernicious anemia. Physiology, under the impetus given by Best and other investigators, began to supplant pathology in interest, developing a consciousness of the *physiology* of diseased organs rather than their pathology.

Surgery made rapid advances, including both pre- and postoperative care, and, as its whole technic widened and grew more complicated, became a hospital procedure. The kitchen operating table disappeared from the scene. Vitamins were introduced with great fanfare and loud advertisement to both profession and public, and the increment thereby of wealth to the manufacturers was probably considerably out of proportion to the increase in health to humanity.

The fourth and fifth decades have been notable for the introduction of chemotherapeutics and antibiotics, heralding a new attack on infection. Death rates from pneumonia, meningitis, subacute bacterial endocarditis, and surgical infections have been strikingly lowered. Malaria, yellow fever, cholera and typhoid, scourges as they were 50 years ago, have been almost completely eliminated by modern research and sanitary engineering. Due to the early development of antitoxins tetanus and diphtheria are but rarely seen today. Tuberculosis has slowly receded from its place near the head of the list of causes of death. Better understanding of shock and the use of blood and plasma have profoundly affected the death rate from war injuries and civilian trauma. Surgery of all types has advanced rapidly, and improved technics and daring have extended its scope to the brain and circulation, invading such heretofore strictly medical fields as hypertension and heart disease. In the latter area, the relief of defects of congenital and rheumatic fever origin seems little short of miraculous. Plastic surgery, stimulated by battle injuries in the first World War, has

made long strides in the repair of defects both congenital and traumatic.

At this point it is worthwhile to record that in all this technologic expansion New Jersey has not been idle. Dr. Edward J. Ill and Dr. Wells P. Eagleton were pioneers, the one in gynecology, the other in brain surgery. Dr. Coit organized the first Baby Health Stations and popularized the pasteurization of milk.

New Jersey was the first state to establish a rehabilitation service and Dr. Fred H. Albee was the first chairman of the New Jersey Rehabilitation Commission. Associated with him was Dr. Henry H. Kessler, first as assistant medical director (1919-1941), and, later, medical director, of the commission. The Kessler Institute for Rehabilitation has become an international center for treatment, study and education in this field. Dr. Philip Levine has been a leader in serologic investigation. With Dr. Landsteiner he discovered the human blood factors M and P, and in 1929 announced the Rh factor and demonstrated its role in causing transfusion reactions. He has made other important discoveries in his field and his contributions have been recognized by many awards. In 1944, Selman Waksman announced the discovery of streptomycin, thus making another important addition to our list of potent antibiotics. For this he was awarded the Nobel Prize in 1952. Dr. Harrison Martland made a primary contribution to the subject of radioactivity when he recognized the dangers in the handling of radioactive substances (1925). By his splendid conduct of the office of County Physician in Essex County he has set an example for coroners' offices the country over. Dr. Lyndon A. Peer has been a national leader in plastic surgery. He was the first to demonstrate clearly the fate of transplants of bone and cartilage in the living body, and has devised new instruments and methods which have been of great value in plastic surgery.

Apology is made for such brief mention of these men and their achievements. A proper appreciation of them, and others not mentioned here, would take an entire chapter. This sketch merely serves to illustrate that our state's role in the medical advances of these past fifty years has not been insignificant.

These and many other of the striking gains of the last quarter century are familiar to all. For the modern generation to gain some idea of the enormous technologic strides that have been made it is necessary only to think of the activities of our hospital laboratories today and to compare them with the practice in the early days of the period. The era of scientific investigation which began with Semmelweis and Oliver Wendell Holmes a hundred years ago has flowered in this half century. Just as the school boy takes radio, television and air travel in his stride, and talks of conquest of the stratosphere as a matter of course, so the intern and young practitioner today accept present day medical knowledge as though it had always been, and little appreciate the vast extension of knowledge in a single life time.

This incomplete picture of the last half century indicates the enormous advances on the technologic side of medicine, the increase in understanding of disease processes, the vast improvement in direct therapy, preventive medicine, and hygiene. Much remains, and we may confidently expect in the not too distant future greater knowledge of cancer and infections like poliomyelitis and rheumatic fever. It remains for someone to think out the implications of the new knowledge and to fit together in this great jig-saw puzzle many of the scattered and apparently unrelated facts which investigators have uncovered and still do not know how to use. History shows that periods of technologic growth reach a peak and then recede, while factual discoveries are worked into old theories or new hypotheses are built. Knowledge is thus re-arranged and solidified. Whether our recent medical advances have already reached such a peak remains to be seen.

With this alteration in the diagnostic and therapeutic tools of medicine there have necessarily been changes in the philosophy and methods of practice and in the theory of disease processes. Group practice had become well established west of the Mississippi before World War I, and following that began to spread into the more conservative East, till now groups

and diagnostic clinics are an accepted and important factor in medical practice. Large hospital centers with their all-inclusive departments have grown apace and form an intrinsic part of every medical school. Specialization was pursued, at first slowly, and then more rapidly, till now it is literally rampant. This was due in part to the vast extension of knowledge to the point where no individual could grasp it in its entirety but must perforce bend all his effort to mastering a limited field. There was also the feeling that the specialist's life was easier, better regulated, and the financial reward greater than that of the general practitioner. Furthermore, new diagnostic tools in the office had to be paid for, higher fees were collected and medical care became more expensive. It appears clear that this has been overdone, for the ranks of the general practitioner have been so depleted that the public has been aroused to protest.

Yet the public takes into too little account that they have merely lost some conveniences for the sake of far greater gains. Some diseases have been controlled, a few almost to the point of extinction, in this never-ceasing war on the ills of the flesh. The hazards of existence are lessened, life expectancy has been prolonged by a decade. The combat with infection shows us more than holding our own. But these are gains on the technologic side, and the public, conscious only of its immediate comfort and convenience, complains that there is a worsening of the patient-doctor relationship. So far we have done relatively little to meet this challenge. The trouble is not so much a shortage of doctors as it is bad distribution in what doctors consider legitimate fields of practice. They have not been considering general practice with any degree of favor, but prefer the more regular hours and better pay of the specialist and want it once they are through with their training. They are loath to undergo the discipline of general practice, and are unaware of its educational value.

This situation has brought the profession under sharp criticism and direct attack, threatening our economic and professional structure. So far it is change and not progress, if progress be defined as change for the better. Nor will it be progress if certain vocative and influential leaders of the public have their way. The proper remedy lies in the fundamental education of the embryo physician, not in legislation. That is the hard way, but it must be done, and we must be given time to do it.

To meet the increasing costs of medical care Blue Cross, Blue Shield, and other types of health insurance are doing something toward a solution. Meantime there are some healthy indications that the general practitioner is to be restored to his place of importance in the medical cosmos and that, in the not too distant future, specialization may be curtailed.

An important movement has gained momentum in the last two decades which endeavors at least to give the public some assurance that specialists in all important lines shall be adequately trained for their respective specialties. This is the Advisory Board for Medical Specialties organized in 1933-34, sponsored by the Council on Medical Education and Hospitals of the American Medical Association, and purposing to . . . "act in an advisory capacity to such organizations as may seek its advice concerning the co-ordination of the education and certification of medical specialists." No board calling itself an "American Board" may be recognized officially without its sanction. The American Board of Ophthalmologists had been established, after some experimentation, in 1916, and was followed slowly by a few others, then more rapidly during the thirties, till now there are eighteen such specialty boards. These boards "(a) Determine whether candidates have received adequate preparation. (b) Provide a comprehensive test . . . and (c) Certify to their competence . . . " if they pass the examinations.

Thus we have a unique plan, not duplicated in any other profession or calling, which assures the public that the doctor who displays a diploma from one of the American Boards at least "is qualified to practice" the specialty whose board grants the diploma. This appears to be a big step forward. Experience is a question of time. Character, judgment, personality are things the public must discover as in any other walk of life. That these "boards" discourage certain men from considering a spe-

cialty, and weed out another large number through their failure to meet the established criteria, does something to keep the specialty ranks from being overgrown. The idea is still young, and the machinery imperfect; but we may confidently look forward to improvement in what it will accomplish, and it is to be set down as one of the great gains medicine has made in our fifty years.

Do all these variants in our professional concepts spell *progress?* It is change; but whether backward or forward does not yet appear clear. Perhaps we have lost something of the art of practice, have been too hurried to let our patients unburden themselves. We are willing to examine, and prescribe for, the ulcer patient, give him a diet, the latest antacid pill, or even an operation; but we could not take the time a year back to listen to his worries, precursors of the present situation, nor do we now, after the ulcer is "cured," take time to educate him in avoiding the next one. The modern physician tries to concentrate his work in the hospital; he goes into his patients' homes as rarely as he can. There the old-time practitioner had something we lack — a real knowledge of his patients' surroundings and everyday lives. The question may be asked— Was he better in the art and practice of medicine than we? Is the increasing list of ambulatory and chronic cases, which swells the absentee ranks, an answer in our favor?

The psychiatrists have done something toward modifying this situation by coining a new word for an old idea, forgotten during the rush of new discoveries during the past few decades. They have made "psychosomatic medicine" fashionable, and, having put a new dress on an old frame, have brought it to our favorable consideration. The term psychosomatic is not a good one. It too obviously separates psyche or mind from body, neglecting the fact, which must be recognized if we are to progress, that mind and body are one and indivisible.

We have seen that at the beginning of our "Fifty Years of Progress," medical philosophy came to be based on pathology. As time went on it turned more toward the physiology of diseased organs. Then came the concept of the individual as a whole and his reaction to classified types of illness. But still another concept is in the making, which is the grouping and study of individuals in their response to specific disease processes. Arteriosclerosis or a streptococcus may attack several individuals, each of whom shows a different response. Multiply the individuals to large numbers and it will be seen that certain constitutional types yield relatively similar responses to the same injurious process. There is no time to elaborate here, but merely to indicate these ideologic problems. This is a sketch, and a sketch only, of changes that have taken place in fifty years; changes remarkable and astonishing from the technologic side, but not altogether clear in our efforts to adjust ourselves and our philosophy of practice to them. In this process something of the art of medicine has been lost; with further adjustment it may be recovered.

So time and change go on and history is made in medical as well as other human affairs. Our regret must be that not all, perhaps none, of us will live to see the full development and benefit of the last half century's gain. *Eheu fugaces . . . labuntur anni!*

20 Elm Street

JAIL FOR SELLERS OF IMPURE MILK*

Five Philadelphia milkmen convicted for selling adulterated or watered milk, have been fined by Judge Barrett from $50 to $75, and sentenced to jail for periods varying from ten to twenty-five days. The grand jury has found indictments against 27 men for selling adulterated Hamburg steak. Food Commissioner Warren is highly pleased with the way the courts are dealing with the men apprehended by his department.

* J. M. Soc. New Jersey 1:75, November, 1904.

FIFTY YEARS OF SURGICAL PROGRESS

David B. Allman, M.D., Atlantic City, N. J.

To some of you, the title of this article will seem like a review of "ancient history." To many others, however, it will bring memories of those not too long passed days when the patient's life depended more on the skill, ingenuity, and dexterity of the surgeon than on mechanical devices, antibiotics, and laboratory procedures.

Many now reading these words can think back and remember case after case that might have been saved thirty, forty, or fifty years ago had we had in our armamentarium a Wangensteen or Levine tube, one of the newer drugs, or even an anesthetic not known in those days.

Considering the lack of these, and many other present-day assets, and with the very meager laboratory facilities available, the results secured with the type of surgery we were able to do were indeed remarkable. Add to this the fact that there was a strong aversion on the part of the patient to hospitals and more especially to "operations," so that most of our patients reached us very late in the course of their disease, and many reached the operating table entirely too late. The phrase "too little and too late" could well be applied to the surgery of fifty years ago.

It was a pretty sickening feeling in those days to see a case of ruptured appendix a week or two old, admitted with marked abdominal distention, generalized peritonitis, and great toxicity. We had no Wangensteen tube to insert, venoclysis was unknown, and modern chemotherapy had not come into being. With open drop ether, we quickly and freely drained the abdomen, gave morphine, started "proctoclysis" and hoped the patient's resistance would be great enough to overcome the virulence of the infecting organism.

Carcinomata rarely reached the surgeon until some evidence of metastasis was visible, at which time as we now well know—and knew even then—it was entirely too late for surgical cure. Many an abdomen did I open in my early years of practice only to find a carcinoma of the stomach as large as an orange, with extensive metastasis not only to the liver and mesentery glands, but to other abdominal organs as well. And this was no one's "fault." The patient was negligent in seeking medical advice, the family physician had difficulty in obtaining permission for x-ray studies, and even when these were done, they were often inconclusive. By the time all agreed that an "exploratory" operation was indicated—and the patient finally consented—it was, of course, entirely too late.

In a large degree, however, those were happy days in surgery. A surgeon was placed upon his mettle. He had to decide the course to pursue after a careful history, an equally careful physical examination, and even a more diligent search of his memory for any similar case he had seen in the past. He could not sit idly on his "throne" and call for "his fiddlers three"—x-rays, laboratory studies, and chemotherapy. He, and he alone must decide. And in his hands was the fate of the patient.

In attempting to attach values to the progress of surgery during the first half of the present century, we must consider scientific theories, the application of discoveries, and humanistic concepts pertaining to them.

It was only during the last twenty years of the nineteenth century that modern asepsis was discovered; so much of contemporary surgical activity during the past fifty years is a continuation and projection of the great development of technology that took place during the closing decades of the nineteenth century.

Nor can the surgeon alone take full credit for much of the advancement. The general advances in all fields of surgery are chiefly due to more accurate diagnosis in which radiology and endoscopy play a major part. A greater understanding of the indications for surgery extended the scope of surgical procedures, as did the continuing reduction in general mortality and morbidity rates resulting from better preoperative and postoperative

care, more selective anesthesia, and, above all, chemotherapy. The pursuit of these objectives through graduate and undergraduate training in surgery has been the motivating force in recent advances.

In the fields which have transformed surgery within the past half century, namely anesthesia and antiseptics, progress has been dramatic; new fields of surgery have been made possible, especially surgery of the lungs, the heart, and the central nervous system.

In the prevention and treatment of surgical infections, chemotherapy has already written a chapter in the history of medicine comparable in its benefits to mankind to the contributions of Lister and Pasteur. Following the work of the Oxford group, the bactericidal properties and therapeutic indications of the antibiotics have gradually evolved.

SURGERY OF CANCER

In the surgical treatment of cancer in its various situations, definite advances have been made: in the earlier recognition of the disease through education of the profession and the public; in extension of surgery in dealing with cancer in locations heretofore considered inaccessible, and in more extensive surgical procedures; in steadily decreasing surgical mortality and in raising both the operability rate and the prospects of cure. The alertness of the profession during the past few years in thoroughly investigating signs and symptoms which indicate early malignant lesions is encouraging, since the first objective is an early diagnosis.

The progress in the development of surgical management of lesions of the esophagus is a tribute to the place of roentgenology and endoscopy in their early recognition.

Pneumonectomy for cancer of the lung has become a routine procedure and is another evidence of the remarkable achievements possible today with a coordinated approach to any surgical problem.

CARDIAC AND THORACIC SURGERY

There have been spectacular developments in surgery of the heart and great blood vessels, for the approach to this problem has been through the experimental laboratory. The achievement of successfully correcting the congenital anomalies of patent ductus arteriosus, tetralogy of Fallot and coarctation of the aorta will be recognized in the history of surgery as one of the great triumphs of this era. The recent procedures devised and carried out on mitral stenosis enter a realm in which modern surgery has already accomplished startling and promising results.

Thoracic surgery has seen dramatic developments in the present generation. The surgical treatment of empyema was recognized by Hippocrates, but the problem of the open pneumothorax was not solved for practical purposes until after the first world war, and until then intrathoracic surgery had always been a hazardous undertaking. Understanding the physiology of respiration had made considerable progress, but appreciation of simple mechanical principles of the thorax came more slowly, and only when the problems of anesthesia had been solved could thoracic surgery be said to have made its real start.

To bring the picture into perspective, it can be said that with the exception of occasional pioneer successes pulmonary resection as a standard procedure dates back only just over twenty years. Many senior surgeons can recall the time when such operations were anxious in the extreme, whereas a modern lobectomy or pneumonectomy is now a routine undertaking with a mortality that compares favorably with any major surgical undertaking.

Other forms of chest surgery have been practiced successfully for longer periods; empyema drainage and thoracoplasty are examples in point, but in general we must look to the past ten or fifteen years rather than to twenty or thirty years for the period of decisive progress.

ADVANCES IN OTHER FIELDS

Significant advances have been made in every field of surgical endeavor, of which a brief listing will suffice here. The neurosurgeons have extended the trephining procedure, which dates back to prehistoric times, to radical excision of brain tumors and even a surgical approach to psychotherapy. Their operations on

the spinal cord and peripheral nerves are little short of miraculous.

Surgery of the eye, ear, nose and throat has likewise made great strides. Improved methods of cataractectomy, the fenestration operation, and extensive resection of malignancies in the upper respiratory tract are but a few that may be mentioned. Paralleling medical advances in the physiology and diagnosis of the thyroid and parathyroid glands has been the surgical management of hyperthyroidism, thyroidectomies, and tumors of these glands.

Entire volumes have been written to describe surgery of the abdominal cavity. It will suffice to remind the reader that operations such as total and subtotal gastric resection, vagotomy, and intestinal anastomosis are largely the contributions of the past fifty years.

The gallbladder and biliary tract are now subject to extensive surgical exploration. Lesions of the pancreas, the spleen, and the adrenal glands are subject to surgical attack.

The field of gynecology deserves special mention for strides that have been made in the past half century. Virtually every form of gynecologic pathology is now subject to accurate diagnostic attack and definitive surgical treatment.

Tribute should be also paid to the pioneers in plastic surgery, among whom Lyndon Peer of Newark is numbered. His contributions to congenital deformities of the oral cavity are nationally known. The mechanization of our society, the coming of the automotive age, and two world wars have accelerated rehabilitative plastic procedures.

With the increasing age of our population, peripheral vascular disorders have assumed a prominence which they previously did not enjoy. This has stimulated extensive research which includes such surgical procedures as sympathectomies, embolectomies, excision of varices, and arterial grafts.

Finally, a word should be said of the outstanding contributions of the orthopedists during the past fifty years. Developing from being mere "fracture specialists", the field of orthopedics now embraces virtually every type of bone and joint disease.

ANESTHESIA ADVANCES

That surgery owes a great debt to anesthesia and the skill of the chemists in providing improvements is very plain. The change has been not only in the agents and technic of anesthesia but in the discovery of hypnotic agents for preoperative and postoperative sedation. The abdominal surgeon of today must be grateful indeed for the advantages that curare gives him, whilst much of present-day intrathoracic surgery would be quite impossible were it not for the ingenuity and skill of the anesthetists.

REHABILITATIVE SURGERY

Fifty years ago, by far the great majority of surgery was performed as a life saving measure. Today, the converse is probably true. A most notable example is the wonderful work being done in rehabilitation and reconstructive surgery.

New Jersey was the first state to establish a rehabilitation service. Under the guidance of Dr. Fred H. Albee, noted orthopedic surgeon and first chairman of the New Jersey Rehabilitation Commission, there was launched the first state movement in the country for the care and rehabilitation of disabled civilians. Dr. Henry H. Kessler was associated with Dr. Albee; from 1919 to 1941 Dr. Kessler served as assistant medical director and, later, medical director, of the Commission. In this and subsequent positions Dr. Kessler developed and carried out the policies, philosophy and technics of rehabilitation as formulated by Dr. Albee.

Dr. Kessler carried this program into the Navy, and the culmination of these efforts was the establishment, in 1949, of the Kessler Institute for Rehabilitation, now a national and international center for treatment, study and education in the field of rehabilitation of the physically handicapped.

Among his contributions to the field of surgery, it might be noted that Dr. Kessler was among the first in this country to develop the method of cineplastic surgery, first practiced among the civilian disabled and later applied to the needs of military amputees. This method was developed to a high degree of ef-

ficiency and is described in Dr. Kessler's book, *Cineplasty*. Dr. Kessler also performed the first case of bilateral pectoral cineplasty on a congenital arm amputee with bilateral shoulder disarticulation.

These are but a few of surgery's contributions to modern health and welfare. Volumes could be written, and in fact have, setting forth the almost miraculous accomplishments of this branch of the medical profession. Suffice it to say, that surgery has kept pace with the wonderful advances in medical science—and New Jersey, as ever, maintains a high place in its ranks.

104 St. Charles Place

HYSTERICAL JOURNALISM*

In legal controversies when the attorney for one side finds the case going against him one recourse has ever been the abuse of the attorney on the other side. In other words resort to vituperation is frequently tantamount to an acknowledgement of defeat. It may serve to raise a dust and so obscure the real point at issue. The unthinking multitude may be and frequently are so impressed by the alleged enormities of the accuser that they lose sight of the truth or falsity of the accusation.

In this manner our esteemed contemporary the *New York Medical Journal and Philadelphia Medical Journal* answers the charges of the *Journal of the American Medical Association*, which are to the effect that the former journal has fallen from its high estate and through its proprietor is opposing the movement in which all the better medical publications are ostensibly united, against the proprietary medicine manufacturers who persist in keeping the formulae of their products a secret and who feel very much hurt by the steps which the American Medical Association is taking to force them to publish the formulae of their products as part of every advertisement.

The editorial utterance of the *New York Journal* reminds us of the story of the old deacon, who was caught in the act of abstracting pork from his neighbor's barrel, and finding escape impossible, boldly stood his ground, saying "The wicked flee when no man pursueth, but the righteous are bold as a lion."

It is no answer to the remarks of the editor of the *Journal of the American Medical Association* to call him hysterical. If hysteria has been manifested so far in this case it seems to us that the editor of the *New York Journal* has been guilty of it rather than the editor of the *Journal of the American Medical Association*.

The friends of the former journal may well grieve at the position its editor has chosen to assume and wish that he had adopted some other means of setting his journal right with the profession.

THE TRUTH OF IT†

A timid member from the boll weevil district handed in the following:

The Doctor sat in his velvet chair
Counting his treasures of gold,
His garments were rich, his luxuries rare,
His lot with kings did well compare—
Or that is the way it should have been
When the Doctor was growing old.
But the truth was this: he had no gold
And he sat on a three-legged stool,
Cursing the bills he couldn't collect,
He had no comforts, and in every respect
He knew that he was a fool,
For the Doctor was growing old.

—*Fifth District Medical Bulletin, San Antonio,* Tex.

* Editorial. J. M. Soc. New Jersey 1:289, May, 1905.
† J. M. Soc. New Jersey 1:279, May, 1905.

THE HISTORY OF THE NEW JERSEY GASTROENTEROLOGICAL SOCIETY*

Julius Gerendasy, M.D., Elizabeth, N. J.

It is appropriate at this, the twentieth anniversary of the foundation of this Society, which coincides with The Journal's fiftieth, to look back and review the growth and achievement of gastroenterology as a specialty in our state.

We have the distinction of being one of the first, if not the first state society in the United States devoted exclusively to gastroenterology. The American Gastroenterological Association preceded us by a number of years and the National Gastroenterological Association was formed about the same time.

In looking back over the years of this society we may well ask if the hopes of the founders have been realized. Our object at that time was to stimulate interest in and disseminate knowledge of gastroenterology. Our further aim was an association in which each member would contribute something to our knowledge as well as to enlighten the profession at large of gastroenterologic progress. It was the wish of the founders to unite in one society trained gastroenterologists who would apply the scientific advancement in gastroenterology to the needs of patients with digestive disorders.

The founding group also envisioned intimate discussion among members who, by pooling their knowledge would enlighten one another. They also had in mind stated meetings open to all interested physicians at which distinguished members of the profession would speak on gastroenterology and related subjects.

Later, in order to inform the medical profession of the yearly progress in gastroenterology the members of this society initiated and have largely manned and directed the section of gastroenterology of the State Medical Society.

The following early note on the history of our society is worthy of inclusion here. It appeared as a communication from the secretary in the December 1933, issue of The Journal of The Medical Society of New Jersey:

> A society called the New Jersey Gastroenterological Society was formed and incorporated May 1, 1933. The following officers were selected for the year 1933: president, Dr. S. Bernard Kaplan, Newark; vice-president, Dr. Louis L. Perkel, Jersey City; treasurer, Dr. Sigurd W. Johnsen, Passaic; secretary, Dr. J. Gerendasy, Elizabeth. (These four were the charter members.)
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> The first scientific meeting was held at the Academy of Medicine, Newark, on October 9, 1933. Papers of the evening were: 1) Clinical and Roentgenological Study of 100 Cases of Constipation, by Dr. Johnsen; discussion by Dr. Gerendasy. 2) Malignancy of the Gastrointestinal Tract in Young Adults with X-ray Demonstration, by Dr. Perkel; discussion by Dr. Edgar Burke.

This meeting was a stated meeting open to the profession, since in our early years business was transacted and scientific papers presented at the home of one or another of the elected officers of the society. The meetings usually ended with a collation to give our members an opportunity to renew old friendships and make new ones as the membership enlarged.

This society was formed at a time when there was some question as to whether there was a place for gastroenterology as a specialty. There was criticism that it was merely internal medicine cloaked by another name. However, during the preceding decades and the early years of the society the greatest industry and scientific effort were being put forth for better methods of diagnosis and treatment of diseases of the digestive organs. Gastroenterologic roentgenology and gastric and duodenal intubation studies were at this time outstanding contributions in bringing gastroenterology into an exact science. The visualization of the abdominal organs in health and disease had a profound influence on the conception of symptoms, the clinical picture and the cause of

* Read at the Twentieth anniversary meeting of the New Jersey Gastroenterological Society, April 22, 1953.

pathologic processes in the digestive system. The intubation studies of the stomach, gallbladder, pancreas and small intestine clarified their secretory functions. Positive and negative diagnoses had become possible in a constantly increasing number of pathologic conditions; knowledge of living anatomy and physiology otherwise unattainable was now achieved.

The charter members, who for a number of years had limited their practice to gastroenterology, early recognized that gastroenterology was becoming an important subdivision of internal medicine and that it merited special training of those who would practice it.

A well prepared gastroenterologist requires the broadest kind of education and training; one which includes the fundamentals of physiology, pathology, radiology of the gastrointestinal tract, psychiatry, laboratory methods of diagnosis, as well as a wide knowledge of internal medicine. In a word, he must have a practical knowledge of all branches of medicine since in the search for the causes of gastroenterologic manifestations and their management there is scarcely a disease of the body that may not present digestive symptoms.

The opportunities for training in gastroenterology were especially good in the years preceding the organization of our society. There were many great pioneers in gastroenterology both European and American; in the United States we had Cannon, Carlson, Alvarez, Gregory Cole, Einhorn, Ivy, Bassler, Rehfuss, S. Weiss, Kantor, Vincent, Lyon, The Mayo Clinic group, A. A. Berg, Dragstedt, Lahey, Ravdin and many others. These investigators and surgeons were doing a great deal of original research or developing new surgical technics. Many of them spoke before our society *(vide infra)*. They established the physiologic basis of our modern conception of gastrointestinal disease, its biochemical nature, its radiographic appearance and the proper medical and surgical approach to its cure.

We older members who partook of their teaching or heard them speak at the meetings of the national societies learned gastroenterology from, so to speak, the ground up. We grew up with these advances and obtained thereby permanent and lasting benefit in the practical application of the art and science of gastroenterology.

In those days we physicians who enrolled in postgraduate courses in gastroenterology had been in the practice of medicine for a number of years and were quite familiar with disorders of the cardiac, renal, vascular and hematopoietic systems; therefore, in the plan of postgraduate instruction emphasis was placed primarily on the field of gastroenterology. The seminar was made so practical that students could apply in practice what they had learned. Attention was devoted to the fundamentals of gastroenterology assuring exactness of diagnosis through well organized courses. These covered instructions in clinics, in the wards of the hospitals, in the pathology and x-ray departments and in the lecture and operating rooms. Subjects included: anatomy, embryology and physiology of the digestive tract; also studies of gastric, duodenal, and pancreatic functions with explanations of the evaluation of the various chemical and clinical tests, technic of the use of the stomach and duodenal tubes, and x-ray examination, fluoroscopically and by film, of the gastrointestinal tract. Instruction was given in the organic and functional conditions of the esophagus, stomach, intestine and biliary tract, such as new growths, gastric and duodenal ulcer, and various types of gastritis; also parasitology, the various types of the colitides and sigmoidoscopy.

In contrast to these practical subjects in gastroenterology the present day seminar of a well-known postgraduate teaching institution emphasizes the correlated clinical sciences of internal medicine. The object appears to be preparation for the examination of the American Board of Internal Medicine, leading to certification as a diplomate. This is indicated by the fact that the curriculum includes 165 ultrascientific lectures on the structure and function of cardiac, renal, endocrine, pulmonary and other systems and only 45 lectures on gastroenterology.

The growth of this society since its inception has been gratifying; there has been a progressive increase in its membership which now numbers 67. The minutes of the society re-

veal the many contributions made by our members both to the literature and the dissemination of knowledge of gastroenterology by lectures, papers published, and scientific exhibits at the annual meetings of the Medical Society.

We have tried to obviate a too narrow outlook of our specialty by bringing together all physicians interested in diseases of the digestive organs. Therefore, our society has as members specialists in gastroenterology, internists, surgeons, a specialist in nutrition, a radiologist, proctologists and others interested in the advancement of gastroenterology and accessory organs. While the society is not large, our members are drawn from all parts of the state and a free exchange of ideas is promoted. The foundation is laid thereby for the continued growth and good work as well as the future success of the society.

Gastroenterology today, as a specialty, has arrived at maturity and recognition. National and international societies foster the scientific propagation of its development; the American Board of Internal Medicine recognizes it as a subspecialty as does the American Medical Association. Outpatient clinics and departments of gastroenterology in charge of an attending specialist are recognized services of many of the progressive hospitals and institutions of this state.

We have among our members: 13 diplomates of gastroenterology or internal medicine; 12 fellows and 6 associates of the National Gastroenterological Association; 10 attendings who head departments of gastroenterology, both medical and surgical; 7 associates in charge of clinics or departments of gastroenterology; 7 in teaching positions.

These clinics and departments in hospitals are now taken for granted by our younger associates. We who pioneered them well remember the difficulties in interesting the powers that be of their usefulness twenty years ago. One had to prove one's worth and win recognition by the medical and surgical services of the hospital through special ability in the care of diseases arising in the alimentary tract and its associated viscera.

In the capacity of a historian it is incumbent to be impartial but in the list of our members are certain names which are intimately bound up in the growth and development of this society since its inception. These are especially the founders who, through the years, maintained their interest in the welfare of the society.

Deserving of mention for faithful performance during their tenure of office and keeping the society alive and functioning are the following: Drs. Sidney Rosenthal, Arthur J. Statman, Benjamin J. Macchia, Leonard Troast, H. R. Wesson, Alexander Strelinger, Theodore S. Heineken, S. W. Kalb, Samuel H. Rubin, Earl Halligan, Andrew J. V. Klein and Herbert Silberner. The last named is our present program chairman. The meetings arranged by him are scientifically of the highest order.

Special mention should be made of those members who have given their share of papers and discussions through the years and thereby contributed toward the advancement of the society as a scientific organization. They are: Drs. Eugene Merliss, Jacob Riese, S. M. Gilbert, G. Irving Levine, Jacob Mathesheimer, Leo Siegel, Herbert Greenfield, F. R. DeVincenzo, E. F. Sciorsci, A. T. Friedman and F. A. Marshall.

A special tribute should be paid to that courageous gentleman, that learned physician and medical historian extraordinary with many honors, Dr. Hyman I. Goldstein. His ever ready citations from the medical literature would indicate that frequently what appear to be modern discoveries are very old indeed.

As previously stated, the New Jersey Gastroenterological Society was organized in 1933. The constitution and by-laws by which the Society functions follow, in principle, those of the American Medical Association. In 1935 it became the first chapter in the United States to affiliate with the National Gastroenterological Association. This gave the members of the society an opportunity to participate in the proceedings at a national level as well as to broaden their horizon of gastroenterologic advances. In 1936, a section of gastroenterology and proctology was formed within the state medical society. This was the first evidence in our state of the acceptance of gastroenter-

ology as a special subdivision of internal medicine.

Among the eminent physicians intimately bound up in the growth and development of gastroenterology in the United States, both medically and surgically, many spoke before our society. The entire listing of their names would be beyond the scope of this history. The following few names and their original presentations have been selected to illustrate their contributions to gastroenterology:

Dr. George Crile (1936): "The Relationship of the Sympathetic and Parasympathetic Nervous System to Peptic Ulcer."
Dr. A. A. Berg (1938): "The Reason for Radical Surgery of Peptic Ulcer."
Dr. Walter Alvarez (1939): "The Value of Physiologic Observations on Man."
Dr. J. Arnold Bargen (1940): "Original Research in Chronic Ulcerative Colitis."
Dr. John L. Kantor (1941): "The Redundant Colon and Its Significance."
Dr. Albert F. R. Andresen (1942): "Allergic Manifestations in the Gastrointestinal Tract."
Dr. F. W. CoTui (1944): "The Value of Protein Hydrolysate in the Treatment of Peptic Ulcer."
Drs. Samuel Weiss and Anthony Bassler (1947): "Newer Therapy in Hepatic Disease."
Dr. Sara Jordan (1948): "Gastric Ulcer Problem."
Dr. Isador S. Ravdin (1948): "The Problems of the Liver and Bile Ducts and Their Management."
Dr. William Grace (1950): "Life Situations, Emotions and Colonic Function."

We may also add to these distinguished names those of our present speakers, Drs. John H. Garlock and Richard H. Marshak, of Mt. Sinai Hospital, and Dr. Moses Paulson, of Johns Hopkins Medical School.

It seems appropriate also to mention some contributions of our own members, singly or as a group, toward the advancement of the society as a scientific organization. The list should properly begin with the gastroenterologic staff of the Jersey City Medical Center. The group comprises: Drs. Perkel, Halligan, Macchia, Troast, Riese, Marshall and Catlaw. We have, on numerous occasions, enjoyed the wealth of clinical material which these members presented. The meetings usually were presided over and actively participated in by Dr. Louis L. Perkel. This group, with that well-known surgeon, Dr. Earl Halligan, ably discussing the surgical aspect, have always prepared a well-rounded and instructive program.

The Beth Israel Hospital group, consisting of Drs. S. Bernard Kaplan, Sidney Rosenthal, A. Statman, S. M. Gilbert, H. Simon, L. Brodkin, H. I. Puller, H. B. Silberner, and Herbert Greenfield, as a group or singly, have always added interest to our scientific programs with their presentations, the most recent of which was on chronic ulcerative colitis in the young.

Our proctologist members: Drs. Frank S. Forte, Richard A. Hopping, Irving Larkey, J. Gerendasy, and Jacob C. Mathesheimer have, on occasion, contributed papers on proctologic subjects of interest to the members.

A few of the individual members' scientific presentations may also be included in this history:

Dr. S. W. Kalb: "Newer Advances in Nutrition."
Dr. Andrew J. V. Klein: "The Value of Gastroscopy in the Diagnosis of Gastric Lesions."
Dr. H. R. Wesson: "Chest Complications Following Upper Abdominal Surgery."
Dr. Theodore Heineken: "The Treatment of Ulcerative Colitis with Phthalylsulfacetamide (Thalamyd®)."

The society inaugurated in 1947 the annual social and scientific dinner meeting in Asbury Park. This is usually held on a Sunday in May. Our host, Dr. Samuel Rubin, is responsible for the program whereby the members and their wives enjoy a pleasant outing as well as an excellent scientific presentation by an eminent speaker. A recent presentation by Dr. Linn J. Boyd of New York Medical College was, "The Practical Applications of Gastric Mucins in Clinical Gastroenterology."

The scientific advancement of gastroenterology in the past twenty years has been most remarkable. It is now amply entitled to recognition as a specialty. It is now no longer sufficient, by those who practice it, to wash out an occasional stomach, to regulate diet and medication in accordance with the degree of gastric acidity or, more important, to confine one's ability merely to gastrointestinal roentgenology in order to qualify as a gastroenterologist. Modern gastroenterology involves procedures that require technical training, skill in performance and knowledge in interpretation. A summation of the clinical and experimental ad-

vances reveals progress in the following directions:

1) A refined and more exact diagnosis of gastrointestinal disorders by means of the radiologic examination of the stomach, gallbladder, small and large intestines.

2) The value in diagnosis of cytologic examination of gastric, biliary and pancreatic secretions by intubation methods. This includes a cytologic examination for malignant cells in suspected gastric and rectosigmoidal malignancies.

3) A quantitative determination of electrolyte balance, serum total protein, albumen and globulin, prothrombin time, serum amylase and lipase, serum phosphatase, liver function studies and many other hematopoietic and biochemical alterations in the blood which are of diagnostic and therapeutic importance.

4) The application of the Miller-Abbott tube in surgery.

5) The Sengstaken tube (esophageal tamponade) for bleeding esophageal varices.

6) Esophagoscopy and gastroscopy.

7) Surgical treatment of the following entities with resultant lower mortality: a) gastric resection for peptic ulcer; b) ligation for esophageal hemorrhage; c) gastric resection for intractable gastric hemorrhage; d) a higher percentage of cures in malignant tumors of the gastrointestinal tract.

It will be noted that in the past twenty years gastroenterology has made rapid and progressive strides to a better understanding and treatment of diseases of the alimentary tract. This society, small as it is, has contributed its share in disseminating this knowledge among the physicians of our state.

It is my duty to record in this history the passing of the following members: Drs. Manfred Kraemer, C. D. Smith, Benjamin Ben-Asher, J. Searle McDede. The untimely demise of these members deprived our society of their accomplishments at the height of their maturity and scientific attainments.

In conclusion, when the younger members celebrate the silver anniversary of this society may we hope that they will say of those who preceded them, "our predecessors have kept faith and have in a good measure carried out the objectives for which this society was founded."

956 East Jersey Street

BOOK REVIEW*

THE BLUES (SPLANCHNIC NEURASTHENIA) CAUSE AND CURE, by Albert Abrams, A.M., M.D., (Heidelberg), F.R.M.S., Consulting Physician Denver National Hospital for Consumptives, &c. Illustrated, 12mo., cloth, 240 pp. E. B. Treat & Co., New York, 1904. Price $1.50.

This manual, like all of Dr. Abrams' writings, is characterized by clearness of expression and singular lucidity of style. He assumes that a large and increasing percentage of cases of nervous depression, muscular weakness, and general inability to think clearly or act vigorously is due to enlargement of the splanchnic veins. To this stasis of the abdominal circulation, with its attendant low state of the intellectual powers, he gives the name of "the blues," and proceeds to lay down simple rules for its treatment. The book affords much food for thought and is so simply and plainly written that the laity can read it with understanding and profit, while to the physician it points out a means of relieving a class of cases that have often proved intractable, and have, in despair, frequently sought the aid of the advertising charlatan. Incidentally, the good results which the osteopaths have unquestionably achieved in such cases, are explained by Dr. Abrams' theory of their pathogenesis and treatment. The old medical axiom that infra-diaphragmatic maladies are characterized by mental depression, while intrathoracic ailments are marked by cheerfulness is at least measurably true. And this little book affords a good explanation of many hitherto ill-understood symptoms which have been vaguely attributed to torpidity of the liver, intestinal indigestion and so on.

It is altogether an admirable monograph, and so interestingly written that we have laid it down with regret because there was no more of it.

CORRESPONDENCE†

Camden, N. J., April 10, 1905.

MY DEAR DR. NEWTON:—There is one thing certain; we cannot get along without the *Journal*. It has amply demonstrated its right to live.

Very truly yours,
E. L. B. GODFREY.

Dr. R. C. Newton,
Montclair, N. J.

MY DEAR DOCTOR:—The April number of the *Journal of the Medical Society of New Jersey* has just been received. For an infant, it certainly appears to be quite lusty.

Wishing you continued success, I am

Very truly yours,
GEORGE H. SIMMONS.

* J. M. Soc. New Jersey 1:286, May, 1905.
† J. M. Soc. New Jersey 1:286, May, 1905.

ADVANCES IN MATERNAL WELFARE

1903 - 1953

Hammell P. Shipps, M.D., Camden, N. J.

Perusal of maternal mortality statistics of the past 50 years should thrill us all as we see the remarkable advances that have been made in this country and in our own state. Reliable statistics for the very early years of this period seem to be unavailable. From 1915 to 1929 the national maternal mortality rates remained at about the same level with the exception of two high points: 9.2 in 1918, and 8.0 in 1920. Most of the advances have been made during the past 25 years, and New Jersey has been in the forefront of some of the pioneer work.

The greatest number of maternal deaths ever recorded in the United States was in 1928. That year 44 states reported 15,461 deaths. This was higher than in any other country as reported in a survey made by the Children's Bureau. This situation aroused much comment in both lay and medical publications. In 1931, Dr. Frederick Adair stated that the high maternal death rate in this country was a reflection on the training and education of the personnel responsible for furnishing maternity care.

About this time interest in the subject became quite active in a number of localities. Previously, medical interest had seemed to lag, but now medical groups began to analyze statistics critically, to discuss end results, and place responsibility. Standards for maternal care began to be drawn up and applied.

Organized maternal welfare work in New Jersey was started in 1923 by Dr. Arthur Bingham, and the Medical Commission for Maternal Welfare was appointed by the Essex County Medical Society. The detailed work of this Commission was carried on by various committees such as prenatal, hospital, educational, follow-up, statistical, and finance. Education and prevention were the main features of this program.

The prenatal committee organized prenatal work in every part of Essex County, following largely the methods employed by the Maternal Center Association of New York City, and the Maternal Center of the Oranges, which had been in operation for two years.

The hospital committee checked up on the work of the hospitals, and induced them to make uniform annual reports to the Committee. A summary of three years of these reports was published in the American Journal of Obstetrics and Gynecology. Dr. Bingham states, "The directors of one hospital with 66 cesarean sections out of 900 deliveries, and those of another hospital with 44 sections out of 400 deliveries, read these reports with the result that in 1933 there were only 21 sections in the former hospital, and 11 in the latter."

The educational committee presented the idea of better obstetrics to the public as well as to the physicians. And the follow-up committee investigated every maternal death in Essex County.

During the first 11 years of the existence of this Maternal Welfare Commission in Essex County, the uncorrected maternal mortality was reduced from 6.9 to 4.4 per 1000 live births, and in Newark from 7.4 to 4.5 per 1000 live births.

In 1931 a Maternal Welfare Committee was appointed by the state Medical Society, the object being to organize a maternal welfare commission in every county. Dr. Arthur Bingham was the chairman. This objective was quickly accomplished, and increasingly better obstetrics has been practiced in every county. The work pioneered under the leadership of Dr. Bingham became a pattern for the entire nation.

Dr. Bingham was an inspiration to all of us who had the privilege of working with him during those pioneer days. His interest in and enthusiasm for maternal welfare and that of the State Maternal Welfare Committee under his leadership were felt in every county of the state. His short articles in The Journal under the heading "A Lesson from a Death Certificate," will be remembered by all of us, for they brought home important lessons in maternity care.

In March 1936, The New Jersey Medical Society and the State Department of Health joined forces to carry on a more intensive campaign for maternal and child health. This was carried out through lectures, literature, and field physicians, one appointed for each county, whose job it was to investigate and make a report on each maternal death; hospitals were urged to make uniform reports on deliveries, mortality, etc. There were also made available qualified consultants for those in general practice who needed such service. These consultants were paid by the State Department of Health. Each county had its maternal welfare committee. In many counties these committees

sat down together with physicians involved and discussed maternal deaths on a very friendly and frank basis with the idea of placing responsibility for these deaths. This program over the years has had a very helpful and salutary influence over the general practice of obstetrics throughout our state, with a resultant marked decrease in maternal mortality.

A look at some maternal mortality statistics will be interesting. In 1918 the rate in the United States was 9.2 to 1,000 live births. In 1920 it was 8.0. In 1923 in the city of Newark it was 7.4.

MATERNAL MORTALITY STATISTICS IN NEW JERSEY

Year	Mortality (Deaths per 1,000 live births)
1931	5.9
1932	5.7
1933	5.1
1934	5.3
1935	4.5
1936	3.7
1937	3.4
1938	3.5
1939	3.1
1940	2.9
1941	2.6
1942	1.9
1950	0.7
1951	0.7
1952	0.6 (Provisional)

Thus one notes a steady improvement, most marked in the last 20 years. Similar programs were carried out in other states. Coming up from behind, the U. S. was the first major nation to have a maternal mortality rate below 1 per 1,000 live births.

During this period of time many changes have taken place. Over the years more and more deliveries have been transferred from the home to the hospital. In 1937, 93 per cent of deliveries were in hospitals. And that percentage is certainly higher today. With the tendency for deliveries to be carried out in the hospital there have grown up in our state some very large and fine maternity hospitals. This has markedly improved facilities for hospital care, and also the education of physicians. But improved facilities do not always mean better maternal care. For good or bad obstetrics can be practiced even in a good environment with the best of facilities. These institutions have had to be carefully safe-guarded by regulations and education in order that wise obstetric practices be carried out. During some of the earlier days of hospital practice, there is no doubt that meddlesome obstetrics was at times indulged in. But now, all of the approved hospitals are carefully supervised, and expert consultants are available for all cases. Several of these hospitals in our state are approved for resident training in obstetrics and gynecology. The number of qualified specialists is rapidly growing, so that few areas in the state need be out of reach of excellent care.

Many older obstetricians have been masters in the use of forceps, and some younger ones may be as well. But there has been a definite swing away from difficult instrumental delivery whenever possible, in favor of some type of abdominal delivery. For of what value is a clever forceps delivery if the musculature of the mother's birth canal is stretched, torn, and scarred so badly as to be almost functionless, and a trail of pelvic symptoms be initiated which will eventually necessitate drastic surgical repair?

With the advances in modern surgery, including extraperitoneal and low cesarean sections, blood transfusions and intravenous fluids, antibiotics and sulfonamides, etc., abdominal delivery in the hands of surgically skilled obstetricians of even potentially infected cases has become preferred to difficult and mutilating vaginal deliveries.

There was a period some twenty to twenty-five years ago when cesarean operations were overdone in some places and these unwisely performed sections added much to maternal mortality. Mortality statistics pointed a condemning finger at this situation in some hospitals and the incidence of cesareans was quickly lowered. Low section has almost entirely replaced the old classical type in the hands of trained men. This has played a definite part in reducing maternal mortality and morbidity. There are, however, some instances where general surgeons are called in emergencies and the classical operation is used. We believe this situation is unfortunate in the interest of good maternity care.

Routine versions of the so-called Potter type had their fling in some parts of our state about 20 years ago, without helping maternal mortality statistics. By and large, operative obstetrics seems to be wisely used in the well managed institutions today, and this has played an important role in the reduction of mortality and morbidity.

During the past 50 years most of the causes of death in childbirth have been defeated, at least to a very large degree. This has not been accomplished by the waving of some magic wand, or the use of some wonder drug. Progress has been attained by arduous, intelligent application of old and new information in many fields.

The once major causes of maternal mortality (infection, toxemia, and hemorrhage) are constantly being attacked and may soon be well

nigh eliminated. Good prenatal care for every mother is now the rule, and has been the major factor in lowering the incidence of toxemia. Elimination of meddlesome obstetrics, use of asepsis in examining patients, and the advent of antibiotics and sulfonamides have been the important factors in controlling infection. Proper prenatal care, wise delivery procedures, and establishment of blood banks have been the principal factors in reducing mortality from hemorrhage. Today we have knowledge and instruments enough to reduce maternal deaths almost to zero. We can prevent most of the complications of pregnancy, labor, and the puerperium; or can recognize them in time to treat successfully those that do arise. This knowledge is now applied broadly throughout the state.

Reduced mortality should not be the only criterion of successful maternity care. We must also be interested in reduction of morbidity and semi-invalidism that often result from ill-advised obstetric procedures. Much progress has been made along this line. Advances in the prevention, care, and repair of obstetric injury to the mother such as uterine prolapse, cystocele, fistula, stress incontinence, etc., have been made. Better obstetrics has made some of these injuries less common, but better gynecologic surgery has made all of them easier to deal with, and is making for healthier and happier mothers, better able physically to care for their families, and to be active in social life. Application of our knowledge of biochemistry, fluid balance, blood transfusions, antibiotics and chemotherapeutic agents, has played a tremendous role in all of this. But perhaps our greatest advances have been made in the field of prevention—prevention of toxemia, prevention of blood loss, prevention of mutilating and difficult instrument deliveries by wise use of cesarean section, prevention of infection in routine deliveries and in operative procedures, and the use of low and extraperitoneal sections in place of the old classical type.

Maternal mortality is progressively approaching an irreducible minimum. It is no longer true that infections, toxemia, and hemorrhage cause 85 per cent of maternal deaths. Infection and hemorrhage have been almost eliminated as causes of death in most institutions in recent years. There has also been marked reduction in the incidence of death from toxemia. We must never, however, let our accomplishments cause us to slacken our vigilance. For complacency could result in carelessness, and upswings in the death rate could quickly occur. The medical profession has good reason to be proud of the progress of the past 20 to 25 years, but let us not be content to rest in our efforts.

719 Cooper Street

WORKS NOT WORDS*

We print in another column Mr. Bok's letter to the medical profession in regard to what he truly styles the patent medicine curse. Were the doctors in the United States one-half as active and as fearless as Mr. Bok something might be accomplished in the effort to rid our land of this egregious wrong.

$80,000,000 a year are said to be spent for patent medicines in the United States. There ought to be little need to dwell upon the evils which result from this traffic. It makes drunkards, robs the poor and brings disgrace upon the practice of physic. And yet physicians sit supinely by and allow the nostrum vendors to throttle every attempt to procure reasonable and proper legislative restrictions upon this flagrant abuse.

No class in the community are so blind to their own interests as the doctors. And no class, we may add, have better intentions and nobler aspirations. But an organized effort to sway public opinion and exact the passage of proper legislation in regard to secret pharmaceutical preparations seems quite beyond them.

In this matter duty and interest happen to be in the same boat. Let our legislative committee see to it that if a bill shall be introduced into the legislature of New Jersey next winter, requiring that all packages containing patent medicines shall have the formulae of their contents plainly printed on the label of every bottle or package, the same shall have our energetic and undivided support. And, further, if no such bill shall be introduced from other sources into the New Jersey legislature, it will be the duty of our legislative committee to see that such bill is prepared and presented and to see further that it shall receive vigorous and untiring support.

* Editorial. J. M. Soc. New Jersey 2:28, July, 1905.

THE MILITARY ROLE OF NEW JERSEY PHYSICIANS IN THE PAST FIFTY YEARS

Henry A. Brodkin, M.D.,* Newark, N. J.

Nineteen hundred fifty-three marks the half century milestone in The Journal of The Medical Society of New Jersey. Its progress through this period, the service it has rendered the medical profession and its present standing among state medical journals have earned our congratulations and best wishes for the future. In 1848, the first official medical magazine, "The New Jersey Medical Reporter," was published quarterly. In 1859 it was succeeded by the Society's "Transactions" which continued until 1903. This was a very important year for The Medical Society of New Jersey because not only was its magazine replaced by the present one but the structure of the medical society was revamped with the establishment of the Board of Trustees.

No period in history is packed with more momentous events. Two world wars, startling discoveries and rapid progress in every field have occurred during the past fifty years. Throughout the length and breadth of the land human activity was spurred on by "step it up" and "step lively." The United States ended the nineteenth century by providing a high standard of living at home and by emerging as a world power in international affairs as a result of the Spanish-American War. It faced the new twentieth century with stimulating optimism as it viewed the products that flowed from its great natural resources and expanding industries. However, when viewed from the present jet propulsion and atomic science era, these accomplishments appear puny. The airplane was a dream and the automobile was a curiosity. It was in 1903 that the Wright Brothers flew the first airplane at Kitty Hawk. The wireless and telephone had limited use and the white porcelain bathroom was the proud product of our civilization. New Jersey's Edison was brightening every home and our factories continued to pour out products that made daily living easier.

The New Jersey census of 1900 disclosed a population of 1,883,669. In 1902 there were 16,539 marriages, 34,812 births and 31,739 deaths. In 1903, Governor Franklin Murphy asked the legislature in his inaugural address to pass a law—"in the interest of the lives and comfort of the community, no automobile shall be allowed in this State that is geared to run at a higher speed than 15 miles per hour." What would he think of the 2500 deaths on U. S. highways during April 1953?

The expansion and growth of New Jersey in every field is largely due to the fact that it is geographically and commercially the best situated state in the country. It is the corridor linking two of the nation's largest cities and lies between two large waterways, the Delaware and the Hudson. Along this corridor pass more vehicles carrying the products of farm and factory than anywhere in the world. The advance of medical science kept up with industrial and economic progress. The death rate in tuberculosis, typhoid, diphtheria and pneumonia showed marked declines and life expectancy advanced more than twenty years. The development of the ophthalmoscope, laryngoscope, endoscope, cystoscope, x-ray and electrocardiography expanded medical knowledge so that a recent graduate today knows more medicine than Osler did at the turn of the century. Glandular, hormonal, chemical and antibiotic therapy enable the modern doctor to treat disease effectively and scientifically and a ward patient today is made more comfortable and cared for better than a millionaire or a king fifty years ago. Surgery has made advances in fields such as the brain, lung and heart which professors fifty years ago never dreamed would be possible. Military medicine kept pace with the strides in science and industry.

During the Spanish-American War, typhoid fever, which was responsible for 82 per cent

* State Surgeon, Col. MC, New Jersey National Guard, New Jersey Department of Defense.

of all deaths from disease, killed more soldiers than Spanish bullets. New Jersey's contribution in the Spanish-American War was 400 men from the New Jersey Naval Reserve who manned the United States auxiliary cruiser "Badger" and three regiments of 1000 men each of the New Jersey National Guard. The "Badger" patrolled the Cuban coast and suffered the loss of one man who fell off the mast! The State troops, after spending five months in the federal service, mostly at Camp Alger, Virginia, suffered typhoid fever casualties and returned home.

During the first sixteen years of the twentieth century peace and progress, higher and better living standards, and industrial expansion inspired strong nationalism at home; the new possessions taken from Spain in the Caribbean and the Pacific made the United States a world power with an international mission. Our protection and security were largely entrusted to a powerful navy while our army remained as a scattered training and security force. In spite of the colossal World War I, which had been raging for two years, no effort was made to expand our army. It was the Mexican bandit Francisco Villa's escapades across the border that mobilized the army and the National Guard into a punitive expedition into Mexico. The New Jersey National Guard was called out and was stationed during that incident along the Mexican border. This affair was called off by an increasing danger to the United States as Germany prepared to embark on her program of unrestricted submarine warfare. Because of possible involvement in the European war and in order to strengthen our Army, President Wilson recalled General Pershing and settled the Mexican affair.

WORLD WAR I

From the outbreak of European hostilities in August 1914 to the United States' declaration of war on April 6, 1917, and in spite of Germany's increasing acts of aggression that threatened our national security and insulted our national pride so that there was mounting popular demands for entering the war, little or nothing was done to increase our military or naval strength. The American people, in general, welcomed our declaration of war with enthusiasm but the country was totally unprepared.

The National Guard of New Jersey was immediately called out and sent to Sea Girt for training. There it was integrated into the 29th Division in July 1917. In July 1918, it joined the United States expeditionary force and was assigned to the French for training. In October 1918, the division played an important part in the Meuse-Argonne offensive and suffered many casualties until the Armistice in November 1918.

The regular United States Army numbered just more than 100,000 men when war was declared in April 1917. One month later, after long bitter debate, a Selective Service Act was passed subjecting all men between the ages of 21 and 31 to military service. The call for volunteers among physicians was promptly answered by a good percentage of doctors from New Jersey. In September 1918, the draft age was expanded to include all men 18 to 45 years of age. From all sources our total military force rose to 3,500,000. Very few physicians were drafted.

The majority of New Jersey physicians were sent to Fort Oglethorpe, Georgia, or Camp Benjamin Harrison, Ohio, both of which served as collecting centers for the training and organization of medical military units. Life here was a radical departure from the practice of medicine at home. The medical lieutenants were assembled from their barracks at 6 a.m. each day for one-half hour setting up exercises. After morning mess, cots were made up and the barracks area policed. From 9 to 12 a.m. medical officers sat and listened to lectures. After noon mess, from one to four p. m., there were more lectures and demonstrations and retreat, followed by evening mess, ended the day. Many of our older doctor friends still shudder when they speak of their hairbreadth escapes from death and disaster during the unpopular periods of equitation. After several months of this indoctrination the medical lieutenants were assigned to different military organizations and installations for duty.

At this point it is pertinent to mention the

influenza epidemic of 1918. It can be best described in the words of Dr. Albert Harden [1] of Newark who was in charge of a surgical ward at that time in the Base Hospital at Camp Hancock, Augusta, Ga. In preparation "to receive a number of sick coming from one of the western camps, we cleaned out all the convalescent patients and sent all the ambulances down to meet the train. To our consternation the entire contingent of about 250 men were very ill and many were dead. To make matters worse, a company arriving from the south were all very ill. At the same time many men from our own camp were stricken. With insufficient hospital beds, tents were pitched to care for the sudden large influx of patients. Each noon a census was taken of the hospital wards and the number of beds evacuated by death were soon filled by patients who were in the tents. The city of Augusta was severely stricken by the epidemic and we were unable to secure undertakers and caskets. Soldiers who in civilian life were casket-makers or undertakers were pressed into service. All the lung sections I examined showed the same picture of greatly dilated bronchioles and alveolae. All cultures of the lungs showed streptococcus hemolyticus. We saw a number of cases who not only had spontaneous pneumothoraces but subcutaneous emphysema from head to lower abdomen. Strange how these cases recovered." An effective treatment was desperately sought but nothing specific proved of value. The epidemic spent itself in 1919.

One of the most important medical developments of World War I was the Carrell-Dakin treatment of infected wounds, later completely replaced by the development of the bacteriophages, vaccines, chemotherapeutic agents, and finally, the antibiotics. It is interesting to review the important role it played in the surgical treatment of wounds. Military physicians were sent for three-week courses to the Rockefeller Institute where the Carrell-Dakin treatment was developed. They were taught to titrate the hypochlorite solution properly, to make and apply the different tubes of the open end, covered or spray types, and to prepare special resin vaseline gauze which was used for protecting the surrounding tissue. In all military hospitals special "Dakin" wards were assigned for the seriously infected wounds of arms, legs, amputation stumps and osteomyelitis. Nurses and orderlies were in turn instructed in the application of tubes and gauze and the proper method of applying the solution into the wound at two-hour intervals. Many patients returning from overseas hospitals with badly infected osteomyelitis had already undergone 10 to 15 curettages. The most frequent operation on the operating schedule was debridement, curettage and application of Carrell-Dakin dressing. Again I depend on Dr. Albert Harden[1] who was in charge of the Dakin ward at the U. S. Army General Hospital No. 3 at Colonia, New Jersey, for a description of this treatment.

Our tour of duty began at 8:30 a.m. A push cart containing tubing, forceps and distributing tubes, rubber gloves, all sterile, was moved from patient to patient, the dressings taken down and, if necessary, new tubes inserted. On alternate days a smear was made before irrigating and sent to the laboratory for a bacterial count which was charted and placed over the patient's bed. We considered 5 bacteria to the field as sterile and closures of the wound would then be made. All dressings were done by instrument, no hands touching any part of the dressings. A sterile towel was placed around the inner dressing and sterile safety pins were used to anchor the tubing as well as the towel. Each case was dressed daily. After a week of treatment the wounds were cleaner and good healthy granulation tissue appeared. Many of the leg and arm amputations showed considerable soft tissue retraction with protrusion of bone. Those that could not be closed with skin traction were re-amputated.

Incidentally, Dr. Harden was complimented for his successful results by inspectors from the Surgeon General's office and after the war he brought his enthusiasm and experience back to his private practice and to the Newark City Hospital with great benefit to both.

A brief survey of the medical installations in New Jersey during World War I is of interest. Hospital facilities not exceeding 200 bed capacity were built at Raritan Arsenal, Metuchen, and Port Newark Terminal. Two hotels were converted into general hospitals. The Lakewood Hotel at Lakewood was the nucleus of General Hospital No. 9 commanded by Col. Mason, author of "Handbook for Hospital Corps." It had a bed capacity of 1000 for general medical and surgical patients and ex-

isted from February 4, 1918 to May 31, 1919. It was designated to receive arthritis and orthopedic patients and on June 6, 1918, was made a center for cardiovascular diseases. Hotel Cape May became General Hospital No. 11 from February 1918 to August 14, 1919, with a bed capacity of 750.

Two existing hospitals were taken over by the Army. St. Mary's Hospital of Hoboken became U. S. Army Embarkation Hospital No. 1 from July 1918 to October 1919. When the armistice was signed it was used for debarking the sick and wounded from overseas. Patients were classified here and evacuated to hospitals all over the United States. Part of the Hudson County institutions located on Laurel Hill at Secaucus became U. S. Army Embarkation Hospital No. 2 from July 1918 to February 1919. It served in the same manner as the hospital in Hoboken until it closed, when it transferred its patients to the Hoboken hospital.

The U. S. Army Base Hospital at Camp Dix, Wrightstown, was greatly expanded and was very active from October 1917 to June 1918. It was here that Dr. Wells P. Eagleton as well as many other doctors from New Jersey served with distinction.

The Army built a cantonment type hospital at Camp Merritt which was located near Dumont, Bergen County. It served as a base hospital from December 1918 to December 1919. It had a normal bed capacity of 2500, but during the height of the influenza epidemic in October and September 1918, 3800 beds and cots were occupied with patients. It was meant to serve as an embarkation and debarkation hospital. The other cantonment hospital was the 1650 bed General Hospital No. 3 at Colonia. Fortunately, it was possible to obtain first hand information from Dr. Alfred P. Upshur, present manager of the Veterans Administration Hospital, East Orange, who was its commanding officer. It occupied 150 acres on the estate of Mr. Charles D. Freeman, president of the New York Stock Exchange. It was constructed in six months and consisted of 18 one-story buildings each of 34 bed capacity and 12 two-story buildings of 84 bed capacity. Dr. Upshur[2] states, "Medical and surgical facilities were ample, and in keeping with the best available at that time." The first patient was admitted on July 5, 1918, and the hospital was inactivated October 15, 1919. During that interval 5,153 patients were admitted. The largest number in the hospital at any one time was 2,100. The total number of surgical operations was 2,051. The hospital was an amputation center and handled all amputees who were disembarked at New York.

Of particular interest and importance to New Jersey was the fact that the chief of surgery was Major, later Lieutenant Colonel, Fred H. Albee, well known orthopedist of New York, and professor of orthopedic surgery at New York Post-Graduate Medical School. It was here that Dr. Albee started a rehabilitation service that was outstanding. From his experience here he became the guiding spirit and active leader of the New Jersey Rehabilitation Commission which began its work in 1919. It was here also that Dr. Harden did pioneering work with the Carrell-Dakin treatment.

Thus ended World War I, establishing a new record for the lowest mortality of war casualties. Deaths among war wounded declined from over 13 per cent in the Civil War to 8 per cent in World War I. Many of the present day specialties received their start and impetus in that war. In surgery, perhaps plastic surgery was most influenced, and in medicine, lung diseases, because of the influenza epidemic and poison gas casualties, aroused the greatest interest. Following the war, the great army was quickly demobilized and the security of the nation was again placed in the scattered regular army of 125,000 men and a comparatively strong navy. Woodrow Wilson antagonized Republican leaders, who under Senator Lodge defeated the League of Nations resolution. The United States returned to "normalcy" under Harding, expanding industrialization and prosperity under Coolidge, depression under Hoover and "Fair Deal" under Roosevelt. Dark war clouds began to creep over the horizon. Hitler came to power in 1933 and Japan began her invasion of China in 1936. In September 1939, the explosion shook the world to its foundations. Germany invaded Poland and the global World War II was on.

WORLD WAR II

The events leading up to World War II are still sufficiently vivid to most physicians to obviate a detailed description in this publication. A brief description of the hospital installations in New Jersey may serve as a source of reference.

At Fort Dix the station hospital functioned as a camp dispensary and had 125 beds. In September 1940, the 44th Division, consisting largely of the New Jersey National Guard, was inducted into service and stationed at Fort Dix. A new 1,000 bed cantonment type station hospital was constructed and completed in 1941. A sudden influx of patients with atypical pneumonia necessitated conversion of a large brick barracks building into a temporary hospital for over 500 patients during the winter of 1940-41. In the latter part of 1942 the number of troops increased with the arrival of staging organizations so that the station hospital was increased to 1500 beds by the additional construction of 49 more buildings. Yearly admissions averaged about 36,000 patients, of which a great majority were hospitalized 6 to 8 days. During the winter of 1943-44, Fort Dix became active as a prestaging area for overseas troops.

Fort Monmouth Station Hospital similarly expanded from a small hospital which had existed since 1917 until it had a bed capacity of 1162. It served as a hospital for all personnel at Fort Monmouth as well as for substations at Camp Wood, Camp Edison, Fort Hancock, Raritan Arsenal and Picatinny Arsenal.

Camp Kilmer Station Hospital, Metuchen, was activated in July 1942. Medical activities here included four principal functions: operation of the hospital, the processing of evacuee casualties, the processing of troops from overseas for redeployment to separation centers, and the operation of dispensaries throughout Camp Kilmer. The hospital was a cantonment type with a 2600 bed capacity. Many New Jersey physicians spent a wistful week at this post prior to departure overseas. It is still in operation.

The Thomas M. England General Hospital in Atlantic City consisted of the Haddon Hall and Chalfonte Hotels. In late 1943, the greatest number of patients was 450. By December 1944 the average daily census of surgical patients had reached 1,697. It was designated as an amputation center and 750 beds were alloted for this purpose. Although the hospital expanded to an authorized 3650 bed capacity, a peak patient load of more than 5000 patients was reached in 1945. The hospital was closed in June 1945, with all patients discharged or transferred.

Tilton General Hospital, a 1000 bed cantonment type hospital was constructed in 1941 in Wrightstown, adjoining Fort Dix. The author was stationed there from October 1941 to December 1943 as chief of the surgical services.* Here about 1000 doctors, many from New Jersey, began their military service and training in the "pool." They were indoctrinated into military medicine by lectures and assignments to various wards. Two general hospitals were organized and trained for overseas duty here. The first casualties from Bataan were received and treated in the early part of 1942. In the fall of 1942, the author received 28,000,000 units of penicillin which marked a new era in surgery. In July 1944, Tilton General and Fort Dix Station Hospitals were merged so that the bed capacity rose to 2557. As a result, it functioned as a station hospital for Fort Dix in addition to continuing its original mission of serving general hospital type patients.

The elaboration on the activity of the army in this article is due only to the author's personal contact with this branch of the service rather than his failure to appreciate the equally important roles played by the Navy and Air Force. The latter particularly attained importance in World War II and in Korea. Surely it is obvious that our armies could not have been convoyed overseas without the protection of the Navy. Modern warfare is a three-pronged affair with the Air Force, Navy and Army each performing its assigned task. Beachheads are established in this manner and campaigns are conducted with each service performing its essential mission to insure success.

During World War I the Navy did not set up any hospital of consequence in New Jer-

* Col. S. Jay Turnbull was commanding officer and Col. Alfred P. Upshur chief of medicine.

sey. The Navy acquired the Berkeley-Carteret and Monterey Hotels in Asbury Park in 1942. They became the Special and Convalescent Hospital for Naval Personnel under the command of Commander William E. Andreas, U. S. N. R., of Trenton. It reached its peak patient load of 1182 patients in November 1945, and was decommissioned in April, 1946. The Navy also maintained a small hospital in Bayonne, for the personnel of the Naval Supply Base which was also the site of the enormous secret super drydock. This drydock accommodated the largest ships afloat as well as aircraft carriers.

The U. S. Naval Air Station at Lakehurst, is very interesting but of comparatively little medical significance. It formerly had been Camp Kendrick, a munition testing ground for the Army chemical warfare branch. The Navy took it over after the armistice in World War I and it became the naval testing station for dirigibles. On May 6, 1937, it sprang into prominence when the zeppelin Hindenberg exploded at the completion of her maiden voyage from Germany.

The Army Air Force erected and maintained a 500 bed station hospital in Newark under the command of Lieutenant Colonel Harry Lotman, now of Irvington. In the fall of 1943 the Air Force took over the Ambassador and Ritz Carlton Hotels in Atlantic City which became Army Air Force Redistribution Station No. 1 under the command of Colonel A. W. Snyder. It served to provide airmen with physical rest and reassignment.

One cannot conclude a discussion of military medicine during World War II without commenting on the advances and improvement in medical treatment. In spite of the high incidence of malaria and other tropical diseases because of the global nature of the war, the general health picture was excellent. The mortality rate had again been reduced for battle wounded to the low figure of four and one-half percent. This was brought about by the following factors:

1. The advances in medicine and surgery in general that provided better medical officers.
2. The administration of antibiotic therapy.
3. The availability of abundant blood and serum.
4. The rapid evacuation of wounded from the battlefield to the point of definitive treatment.

SOCIETY PARTICIPATION

Five years after the victorious conclusion of World War II, we were again involved in military action in Korea. The Army had been quickly demobilized and one of the difficult problems was to supply medical officers. This was accomplished by a special law to draft doctors up to the age of 51 and by calling into service those doctors who had received their medical education at the expense of the government.

The recruitment of unprecedented numbers of men and women to conduct a global war required strenuous efforts for the procurement of an unusually large number of medical officers. The Medical Society of New Jersey was of great assistance in fulfilling this mission by establishing, on July 10, 1940, a Committee on Medical Preparedness under the chairmanship of Dr. Charles H. Schlichter. In the May 1942 issue of THE JOURNAL of The Medical Society of New Jersey, it was announced that Dr. Schlichter was appointed the New Jersey representative of the Procurement and Assignment Agency by Paul V. McNutt. Dr. Schlichter appointed four assistants and designated a confidential representative for each county to inform the committee of the availability of each physician whose name was submitted to him by the Procurement and Assignment Service. During the Korean conflict, the armed services seemed to find difficulty in securing sufficient medical officers. Of assistance in this regard has been a committee established by The Medical Society of New Jersey under the chairmanship of Dr. William G. Herrman of Asbury Park. This committee works in cooperation with the Selective Service Office in New Jersey.

KOREA

In addition to men inducted through Selective Service, a Marine Reserve Ordinance Company, and a large number of officers of the organized reserve, New Jersey's Air National

Guard contributed the 108th Fighter Group and the 141st Fighter Squadron from 1951 to 1953.

In three years of fighting in Korea, military medicine continued to progress. The evacuation of the wounded was tremendously improved by the greater use of air transport. Helicopters were brought into service to pick up wounded at the scene of fighting and severe cases were flown directly to mobile army surgical hospitals. Aircraft were used to fly casualties to hospitals in Japan. Ninety-eight per cent of casualties are flown back now and only two per cent are returned by sea. The use of antibiotics, efficient surgical teams in forward areas and increased efficiency in organization and planning have reduced the mortality of battle wounded to a new low—two and one-half per cent. Thanks to research during and soon after World War II, malaria, long a leading cause of illness, has been suppressed by chloroquine and cured by primaquine. During the first year of the Korea conflict, there were 10,000 cases of malaria. In the treatment of 2,000 malarial patients only one known relapse has occurred.

A new challenge to military medical research appeared in Korea in a disease unknown to the western world, epidemic hemorrhagic fever, which was seen in our soldiers in the spring of 1951. This disease presents difficult problems in diagnosis, etiology, method of transmission, prevention and treatment.

The battlefield death rate continued to be the same, nearly 20 per cent. A team was sent to Korea to conduct a missile casualty survey. This team studied 4,600 cases of "killed in action" and "wounded in action." This study resulted in the employment of the nylon armor vest which during a test period showed that 65 per cent of all type missiles were stopped, 75 per cent of all fragments and 25 per cent of all small arms missiles. It reduced the incidence of chest and upper abdominal wounds by 60 to 70 per cent and in about 30 per cent of these wounds the severity was greatly diminished.

In this panoramic survey of the advance and progress of military medicine it can be seen that the role of the physician played a very prominent part in the successful outcome of all military engagements in which this nation participated. From the time of the Spanish-American War, when the sickness rate was so high that had the conflict continued for a longer period, a major catastrophe could not have been avoided, to the recent conflict in Korea, where morbidity and mortality have reached the lowest rate in military history, American medicine and American physicians have played a most important role. Correspondingly, the physicians of New Jersey acquitted themselves unhesitatingly and unstintingly. New Jersey and the New Jersey Medical Society are proud of the contributions that our doctors made in the preservation of the health and well being of American service men during our military struggles.

Acknowledgment is made to the Office of the Surgeon General, United States Army, for providing some of the material used in the preparation of this article.

365 Osborne Terrace

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ULCER OF THE STOMACH*

Medication, while the least important, is, perhaps, of some benefit. Bismuth subnitrate in large doses in connection with the dietetic treatment mentioned has given most satisfactory results. The exhibition of alkalies for the purpose of neutralizing the gastric juice has been advocated, and also stomach washing with a solution of silver nitrate. The latter seems like a rather heroic proceeding, particularly as the exact pathologic condition present in these cases must be a matter of guess, unless seen upon the operating table or post mortem.

Until our technique is further perfected, only those cases should be operated upon in which the symptoms persist, notwithstanding the most thoroughly conducted dietetic treatment and whose sufferings and physical condition justify a considerable risk in an attempt to cure.

* Fogg, E. S.: J. M. Soc. New Jersey 1:182, February, 1905.

THE MOTHER'S MILK BANK OF ESSEX COUNTY

Harrold A. Murray, M.D.,* Newark, N. J.

About fifteen years ago the Child Welfare Committee of the Essex County Medical Society established a mother's milk bank as a service to the physicians and the infants of the county. At that time the value of breast milk was recognized as an important adjunct in the feeding of premature infants and very young babies who had recently undergone serious surgical procedures. Special adaptations of cow's milk were not available as they are today. In many cases the favorable results were due in large part to this important aid.

THE ORIGIN

The inconvenience, and often the non-availability of securing breast milk from the New York Milk Bank indicated the need for establishing such a milk bank in Essex County, located at the Babies Hospital-Coit Memorial in Newark. The medical board of that hospital accepted the idea and assumed responsibility for housing the bank, examining the milk for dilution and contamination, determining the bacterial and fat content, pasteurization, freezing, storage and disposal of the milk. Physicians, particularly obstetricians, procured the donors with the aid of the Woman's Auxiliary of the county society. Many community agencies cooperated. The American Red Cross transported donors to the center or brought to the bank breast milk collected at their homes. The Contemporary Women's Club of Essex County diverted monies from their milk fund to pay for breast milk for the indigent. St. Michael's Hospital in Newark generously donated the deep freezing unit for freezing and storing this precious product.

The county medical society assumed complete responsibility for the undertaking. It began and still continues as a special program of the Child Welfare Committee. With funds supplied by the society, the necessary essentials to start the bank, such as bottles for collection and storage, equipment for freezing the milk, etc., were purchased. The bank is operated as a non-profit venture with the sale price of the milk varying from thirty-five cents an ounce down to no charge for deserving cases. Every donor receives ten cents for each ounce of breast milk supplied. The hospital receives ten per cent of the monies collected.

It is interesting to report that in the entire period of operation the bank has sustained itself without placing any financial burden upon the county medical society. From a very modest beginning this bank has grown so that today it is one of the most successful mother's milk banks in the country. Many older ones have ceased to exist and it is supplying breast milk not only to our own state but also to nearby states, including New York. The bank has never been completely empty and now has over one thousand ounces of breast milk in its freezing and storage unit.

THE NEED

Many physicians might question the need for such a service. It is true that with the advent of powdered and fluid modifications of cow's milk and the perfection of intravenous therapy, with the newer knowledge of acid-base balance and electrolyte chemistry, the need for breast milk is not as great today as it was fifteen years ago. However, it is a fact that in postoperative feeding of the new-born, and in difficult feeding problems of the premature infant, breast milk is at times life-saving.

Cow's milk differs from breast milk in many important aspects. Although we cannot say that milk is truly species specific, that the milk of one species cannot nourish the young of another species, we do know there are quantitative differences in the protein, carbohydrate,

* Director of the Mother's Milk Bank of Essex County and past-president of The Medical Society of New Jersey.

fat, minerals and vitamins in the various species.

The principal difference in human and cow's milk is in the fat content. The milk of certain breeds, such as the Holstein, has a lower fat content than either the Jersey or the Guernsey. This is most important, especially in the feeding of the premature infant. There are differences between the proteins of the two milks. In human milk the lactalbumin constitutes about 60 per cent of the total protein and the casein about 40 per cent. In cow's milk there is about 85 per cent casein and about 15 per cent lactalbumin. In many difficult feeding cases in premature and postoperative infants these differences are important and are recognized by pediatricians.

THE DONORS

Many fascinating experiences have occurred during the years in which this bank has been in operation. The type of donor and the amount of milk supplied have been most interesting. In the beginning, most of the donors came to the bank to give their milk. They were carefully screened by their own physicians or in the clinics to rule out infection or disease and to check whether or not they were successfully nursing their babies. Many of these mothers were from a low income bracket and had to return to work immediately after their confinement. When they found that they could supplement the family income by selling their milk, they remained at home, nursed their babies and did not have to return to war plants. These women were most successful in their efforts. One donor nursed twins successfully and received remuneration from selling her milk for over six months, thus increasing the family budget by about twenty dollars weekly during that period. Of course this is a rare instance, but it was not unusual for a mother to sell about a pint of milk daily for several weeks and at the same time nurse a well developing infant at home.

Later the type of donor changed. With improving economic conditions and with the increase in the incidence of breast feeding many mothers, educated by their physicians and friends, saw the great help they were giving in offering their milk to babies in distress. They were willing to donate their milk free for this cause. Their generosity was never accepted; the usual stipend was given to them and today many youngsters can proudly exhibit a defense bond or two as a recognition of the contribution of an understanding mother.

One young lady, whose family increases yearly, manages to replenish the bank with her milk when the supply becomes low. We welcome her great productivity and her willingness to cooperate.

All the milk at the present time is collected at home and transported to the bank by members of the donor's family. The milk is checked carefully for adulteration and dilution. The donor and her infant are examined at frequent intervals by the referring physician to check the physical condition of the mother and the weight gain of the nursing baby. We have found that the weight of the baby does not suffer and that the mother nurses her infant for a much longer time when she sells her breast milk.

THE ROUTINE

When the milk is received it is examined, pasteurized and immediately frozen in bottles. In the beginning, when the demand was less and the supply greater, the milk was frozen in discs and stored as wafers. This required less space for storage. It is now frozen and stored in eight ounce bottles and can be kept safely in this state for about a year. However the demand is such that the milk does not remain in the bank longer than six months. No more than one thousand ounces are stored in the bank and when that amount is on hand donors have to be restricted.

When milk is needed for an infant, a member of the family procures it in the frozen state at the bank, transports it to the hospital where it is heated and boiled before it is administered. Greatest diligence and precaution are maintained in the procurement, pasteurization and distribution of this product. We have never had a report of an unfavorable reaction to milk from the bank. During the past fifteen years we have dispensed several thousand ounces of breast milk.

CONCLUSION

At first the sale of the milk was restricted to residents of Essex County. The supply was not as adequate as it is today and the need greater. The milk is now available to any physician for use anywhere for any deserving case. From the many follow up reports the milk has been a definite contribution when other measures have failed. It is the only mother's milk bank in New Jersey and is one of the very few remaining banks in this country.

We shall continue the bank as long as the supply of breast milk is available and the demand for its use still present.

Recognition must be given to the valuable services offered in the beginning by Drs. Chester Brown and Albert Harden, Jr., of the Essex County Medical Society and, over the years, to the great help and cooperation of Mr. Daniel O'Neill and Miss Flora Floyd of the staff of the Babies Hospital.

624 Mt. Prospect Avenue

OSTEOPATHY IN 1905*

To Dr. David St. John,
Hackensack, N. J.

Dear Sir:—During a certain conversation over the telephone last July you emphatically stated that you could not sanction or countenance my consulting an osteopath, saying that you would be unable to continue with the case if I did so.

I, at the time, took great exception to your stand, and I take this occasion to offer you the most thorough and complete apology for having doubted the wisdom and correctness of your attitude.

My experience with osteopathy has not been with obscure, unknown practitioners of some treatment masquerading as osteopathy, but with men who are among those most prominent in osteopathic circles, and I wish to say that it is my deep conviction, based on observation of their methods and treatment that osteopathy is simply a species of ordinary massage absolutely incapable of accomplishing more than can be done by any regular masseur. In the case I took to these osteopaths for examination they said that there was a dislocation of the vertebra, and proceeded, so they said, "to snap it back into place."

Subsequently the following gentlemen: Dr. Charles L. Dana, Dr. Dudley D. Roberts, Dr. Lewis S. Pilcher, Dr. Walter Truslow and yourself diagnosed the case as infantile paralysis, a bacterial disease causing inflammation of the spinal cord and paralysis. I wish to emphasize the fact that these osteopathists diagnosed the disease as due to a dislocated vertebra, which, unfortunately, is prevalent enough to be readily recognized by every regular medical practitioner. Apropos of a dislocated vertebra, I attended the hearing in Albany on Wednesday on the bill to legalize the practice of osteopathy in the State of New York. Dr. Robert T. Morris, of New York, defied any osteopath present at that meeting to deflect a vertebra, which he had there for experiment, one-fifteenth of an inch. There was no response.

During the latter part of our summer in your town I no doubt gave many of our friends and acquaintances favorable impressions of what osteopathy was accomplishing. You have my full sanction to publish this letter as a complete and unreserved retraction.

Very truly yours,
RALPH M. HELMER.

104 Gates Ave., Brooklyn.
March 4th, 1905.

The above letter fully explains itself and we are glad to give it room. Especially as we also give room to Dr. Shelton's case in which osteopathic treatment evidently did good. These two cases taken together afford a striking object lession of three important truths, viz.: Properly applied manipulative treatment should have a wider range in therapeutics than it has heretofore had. Second, the persons now practicing so-called osteopathy are not competent to properly diagnose and select the case requiring manipulative treatment, and consequently, have done and are doing much harm by the indiscriminate application of such treatment. Third, it follows from the above that a careful diagnosis should be made in all cases by a competent physician to determine which of them should be submitted to manipulative treatment.—(Ed.)

* Correspondence Department. J. M. Soc. New Jersey 1:249, April, 1905.

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CHANGES IN OTOLARYNGOLOGY IN THE PAST FIFTY YEARS

Henry B. Orton, M.D., Newark, N. J.

Many changes have taken place in the past fifty years in otolaryngology. Sir George Johnson said, "For we have the comfortable knowledge, that unless a laryngoscope should be dug up in the ruins of Pompeii, or found depicted in an Egyptian tomb, we could rest content in agreeing that laryngology originated in 1854, and owed its creation to the discovery by Senor Manuel Garcia, of the laryngeal mirror."

The direct laryngoscope was perfected by Chevalier Jackson and others. Recently, laryngeal photography has reached such refined development that normal movements of the larynx and living pathology may be projected on the movie screen for all to see.

In the treatment of carcinoma of the larynx, the late Dr. John MacKenty of New York did more to develop laryngectomy in this country than any other man. Also, Dr. Fielding O. Lewis of Philadelphia and Dr. Joseph Beck of Chicago contributed greatly. Dr. Chevalier Jackson of Philadelphia, meanwhile, developed the procedure of thyrotomy or laryngo-fissure.

The importance of the pre-epiglottic space was brought out by Jean Leroux Robert. The block dissection of the lymph nodes following laryngectomy, has resulted in improvement of the survival rate—and the prophylactic block dissection in some cases should further improve the survival rate of cancer of the larynx.

In England, Sir St. Clair Thomson, Sir Wilfred Trotter and Lionel Colledge reported their successes by laryngo-fissure, lateral pharyngotomy, and laryngectomy, respectively, in the treatment of carcinoma of the larynx and pharynx. It was my privilege to know these men and observe them operating. Prior to 1900 the operative mortality in total laryngectomy was rather high; this has now been lowered to 1.7%. Better technic, improved postoperative care and the use of antibiotics have materially helped in reducing the mortality.

Bronchoscopy and esophagoscopy have shown remarkable progress in the study of the bronchus and esophagus. In diagnosis and treatment great progress has been made.

At the turn of the century Gross classified foreign body patients into two groups: the first group—those who inhaled foreign bodies and later coughed them up and got well; the second group—those who came to autopsy. Rarely, now do these cases come to autopsy. Chevalier Jackson has done a monumental work in this line by instructing and teaching the practice of broncho-esophagology. Cytology, by aspiration of secretions from the bronchus, has been most valuable in earlier recognition of bronchiogenic carcinoma. This has been a remarkable contribution in the past few years.

Although the operation of tracheotomy has not been markedly improved since the time of Hadrian (117-118 A.D.) the conditions for which it is used have increased considerably. Tetanus, diphtheria, anesthetic and postoperative emergencies, poliomyelitis, botulism, craniocerebral injuries, are just a few of the respiratory emergencies in which it is indicated.

The antibiotics have played a large part in reducing the need for radical surgery on the nasal sinuses and otologic surgery. This, however, may only be a transitory stage, as more and more patients are showing a reaction to these chemicals due to their indiscriminate use. However, radical sinus surgery has given way to a more conservative approach to establish drainage and ventilation.

The antibiotics do play a very important role in the postoperative care and treatment of many surgical cases, and their use has lowered the incidence of postoperative infections to a great degree.

Plastic surgery also has shown marked progress since the end of World War I, in the repair of deformities caused by disease or trauma. It has also aided in the rehabilitation of patients with disfiguring conditions.

Such are some of the advances in otolaryngology during the past fifty years. There are many that I have not touched upon, but those I have mentioned come to my mind as the most outstanding.

224 Delavan Avenue

FIFTY YEARS OF PHARMACOLOGY

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Since The Journal of The Medical Society of New Jersey was first published in September 1904, every branch of medicine has made great strides. Technics of diagnosis, understanding of physiology, pathology and pathophysiology, and advances in surgery have reached unprecedented peaks. Pharmacology has shared in this progress. It is enlightening, at this stage of The Journal's career, to compare pharmacology at the turn of the century with its present status, to outline New Jersey's contribution to this progress, and to survey the problems that lie ahead.

By 1900, principles of physiologic and pharmacologic investigation had been well established. The work of Withering, Magendie, Claude Bernard, and many others in previous centuries had laid down rules for the careful observation of physiologic phenomena in the normal, the diseased, and as altered by drugs. Advances in chemistry, particularly organic, made it possible for investigators to apply innumerable chemical substances to the treatment of disease, and observe their action in modifying normal and abnormal physiology. These principles of investigation have not lost their validity, and today countless researchers seek new methods and new drugs for the alleviation of human illness.

A review of the standard textbooks of the day will give a picture of pharmacology as it existed in the early 1900's. In so doing, certain impressions stand out: the greater proportion of drugs derived from plants, the amount of space devoted to compounding and prescription writing, and perhaps most surprising, the many familar drugs which are still in use today.

Shoemaker,[1] writing in 1906, described treatment as rational, symptomatic and empiric; the proportion of his text devoted to the latter two is far greater than that given over to the first. A good part of his text is devoted to listing herbinicals, with their Latin names (for prescription purposes). Among the drugs listed which are still in use today, the following will be familiar: aspirin, phenacetin, pyramidon, ethyl chloride, iron, and codeine. Intravenous therapy is discussed at length, especially the use of saline, which is recommended for cholera patients in collapse. Blood transfusions are described, but of course there is no mention of typing or cross-matching. A good part of the book is devoted to electrotherapeutics, massage and rest, pneumotherapy, hydrotherapy, and balneotherapy (baths), climatotherapy, diet, hypnotism and suggestion, heat and cold, light and darkness, cupping and leeches, subjects which find little place in today's pharmacologic treatises.

The sixth edition of Wilcox,[2] published in 1906, lists a number of drugs which would be unfamiliar to today's students. "Kamela" and "Kousso" are mentioned as anthelmintics. Picrotoxin internally is suggested for atonic conditions of the stomach, migraine, dysmenorrhea, and the night sweats of phlebitis. Among the cardiac drugs, some are familiar, such as digitalis, strophanthus, caffeine, and squill; others, like adonidin, convallia majalis, erythrophloeum, camphor, and musk are unknown today. Daturin, Duboisine, cocaine and saponin are listed as cardiac accelerants.

Cushny's[3] fourth edition, published in 1906, follows a systematic pattern of presentation similar to that used in today's pharmacology texts. Drugs are classified according to their local or systemic action, and then by drug classes. There is an extensive description of alcohol and chloroform; ether, chloroform and nitrous oxide are discussed in detail as the inhalation anesthetics. Strychnine was a popular preparation, and was recommended for "many ill-defined conditions of weakness, cachexia, and 'want of tone' generally." It was advised for forms of paralysis where distinct anatomic lesions of the central nervous system were absent, and especially indicated in cases of lead

poisoning! Cushny's list of opiate preparations would be familiar to any physician today. The related alkaloids hydrastine, berberine and canadine, the first being recommended for uterine hemorrhage, are at present in oblivion. Cannabis indica from hemp is mentioned as a useful hypnotic where opiates are not desired. Arsenic, another popular drug of the time, was subjected to critical evaluation by Cushny and found somewhat wanting in its therapeutic value. Cushny's text is noteworthy for the scientific fashion in which each drug is described and its pharmacologic action evaluated.

Bastedo's [4] first edition, published in 1913, is organized according to physiologic action, rather than by class of drug. Thus, we find sections headed by such titles as emetics, antemetics, astringents, anthelmintics, cathartics, circulatory drugs, central nervous system drugs, etc. Many preparations still extant are described, including epinephrine, posterior pituitary gland extract, digitalis, ergot, and others.

In the early 1900's, therefore, pharmacology had reached a relatively high degree of development, based on sound principles of research and investigation. The horizon was limited chiefly by a large residue of empiric preparations derived from plants, the efficacy of which was under attack by men of Cushny's stature, and by the limits of chemistry in discovering new and better preparations.

In the intervening years, marked progress has been made, of which the present generation is the beneficiary. Only a brief recounting is necessary at present.

ANESTHETIC AGENTS

Anesthesiology has now become a specialty in itself, and modern anesthesia is as distantly removed from the drop-ether methods of the last century as today's surgery is from the kitchen-table operations of yesteryear. Intensive study and investigation have added such new agents as ethyl chloride, cyclopropane, trichloro-ethylene, and intravenous sodium pentothal. Today, the anesthesiologist fits the anesthesia to the patient's physiologic state and to the needs of the surgeon; he can alter and control the course of anesthesia as the operation proceeds. Intratracheal anesthesia under controlled pressure has paved the way for today's miracles of thoracic and cardiac surgery. Caudal anesthesia, continuous spinal, local block, are but a few of the areas in which anesthesia has expanded. The realization that today's anesthesiologist is an important member of the surgical team has been a major advance.

AUTONOMIC NERVOUS SYSTEM

Walter B. Cannon's classic investigations of the autonomic system shortly after 1900 and for almost fifty years thereafter stimulated further research of this important branch of the body's economy. As a result innumerable studies have been made of both the sympathetic and parasympathetic systems, and many drugs of practical therapeutic importance have come into use. The most recent advances along these lines are the use of cholinergic and adrenergic blocking agents for the treatment of peptic ulcer (so-called medical vagotomy), and essential hypertension. Newer preparations and uses are thus constantly being found for this important group of drugs.

CARDIOVASCULAR SYSTEM

Although digitalis, mercury and the nitrites were familiar to practitioners of fifty years ago, major advances have been made in these drugs. Cardiologists today choose from a variety of digitalis glycosides in purified form, among which the most widely used are digitoxin, digoxin, lanatoside C and gitalin. The introduction of these purified products, each of which is approximately one thousand times as strong as the original leaf preparation, has brought with it some problems of toxicity, but has also permitted a wider range of therapeutic application.

Mercury, in the form of calomel, was the only mercurial diuretic in use at the turn of the century.[3] Since that time parenteral mercurial diuretics have enjoyed wide acceptance in the treatment of many forms of edema, but especially in edema due to congestive failure. As late as 1941, mercury by injection was considered the only effective way of administering this diuretic,[5] but recently oral mercurial

diuretics have been developed which offer great promise.[6] Thus the wheel completes its turn! An offshoot of the intensive use of mercurial and other diuretics has been an intensified study of the effects of these agents on electrolyte balance, with the emergence of a new disease entity, "low-salt syndrome."

The nitrites are described by Cushny[3] as coronary vasodilators, for which they are still in use. Strangely, little progress has been made in the pharmacology of coronary insufficiency, although marked advances have been made in diagnosis, understanding of its pathophysiology, and general management.

In peripheral vascular disease, research has been active, but results somewhat equivocal. There are a plethora of peripheral vasodilators available, but how effective they are in providing more than symptomatic relief remains for future determination.

CENTRAL NERVOUS SYSTEM

One of the most significant events in medical history occurred in 1903 with the introduction of barbital, the oldest barbiturate, into medicine. Since then countless other chemical derivatives have been manufactured, and there is no need to restate the significant place these drugs hold in medical practice today. Moreover, barbiturates have achieved sociologic significance as they have become the method of choice for would-be suicides. The problem of acute barbiturate overdosage is one that faces every physician today.

Dilantin is a new addition to the family of central nervous system drugs, having been introduced in 1938. Since that time, many other anticonvulsants have been developed, and are in wide use today.

The field of neurologic pharmacology has also advanced in a search for newer preparations for Parkinsonism, newer anesthetic agents, and intensive exploration of autonomic system agents. The range of neurologically active drugs is wide, and well known to all.

ENDOCRINOLOGY

Except for the therapeutic action of thyroid, introduced around 1900, the entire field of endocrine pharmacology has been a development of the first half of the twentieth century. Active extracts of the parathyroid gland were first obtained in 1924; investigation of anterior pituitary extract dates from the 1920's, and has received additional impetus only in the past few years with the isolation and commercial availability of adrenocorticotropic hormone. The male and female sex hormones and their relationship to the gonadotrophic hormones of the anterior pituitary are entirely a product of investigations carried out in the past 30 years.

It would be presumptuous to do more than record as a fact that Banting and Best first isolated insulin in 1922, prior to which time the treatment of diabetes was more prayerful than fruitful. Yet even this remarkable discovery has not closed the chapter on diabetes, and active research is still going on for improved forms of insulin. The diabetes problem today is not one of saving lives from acidosis and coma, but of preventing the premature degenerative changes which so often prevent diabetics from completing their full life span.

The announcement of cortisone as a therapeutic agent for rheumatoid arthritis and other conditions has broadened the horizons of endocrinology until it now encompasses the entire scope of human physiology and pathology. We have had to reappraise virtually every field of medical endeavor, from postoperative stress states to the minute details of fibroblastic proliferation and wound healing. The role of the adrenal-pituitary axis in human physiology is still far from fully explored, and its importance cannot be fairly appraised at this time.

INFECTIOUS DISEASES

The control of infection which has been accomplished in the past fifty years is too familiar to bear repeating. It may be of interest, however, to report the reaction of New Jersey physicians to the introduction of the three major anti-infection agents, the sulfonamides, penicillin and streptomycin.

In 1937, Tarbell[7] presented the first case report in this JOURNAL of the use of sulfanilamide in gonorrhea, and, interestingly enough, described sulfhemoglobinemia as a serious toxic

complication. He warned that sulfanilamide was irritating to the lungs, heart and kidney when its administration was uncontrolled. The famous tragedy of that year, the death of 73 persons who consumed "Elixir Sulfonamide," was described by Ulmer and Fischelis,[8] the cause of death being attributed to the solvent diethylene glycol, which was used in preparing the elixir. A review of progress in sulfonamide therapy was presented by T. K. Lewis[9] in 1939, and clinical experience to that date was summarized.

Penicillin was discovered by Fleming in 1939 and used clinically since 1940. An abstract from the Journal of the American Medical Association was published in this Journal in August 1943, in which it was advised that penicillin be restricted to sulfonamide-resistant strains of gonococcus due to the limited amount of available penicillin. The author recalls that during his internship in 1943 the civilian use of penicillin was limited to cases approved by a national committee of allocation and distribution, because most of its output had been assigned to the armed forces.

A complete review of the pharmacology, administration dosage, indications and toxicity of penicillin was presented by Carey[10] in 1944 in The Journal, although even by then the author stated, "It is unfortunate that the requirements of our armed forces for this material make it difficult, for the present, to secure an adequate supply for our civilian needs." Finally, in February 1945, Judge,[11] writing of experiences at the Camp Kilmer Station Hospital, described his results with penicillin in the treatment of 80 patients with sulfonamide-resistant gonorrhea. His dosage schedule was 10,000 units every hour for 10 hours, for a total of 100,000 units!

Although sulfonamides and penicillin were European discoveries, streptomycin can be said to be a true local product. It was first isolated in January 1944, by Schatz, Bugie and Waksman[12] at the Department of Microbiology of the New Jersey Agricultural Experiment Station of Rutgers University. For this important contribution Waksman received the Nobel prize in 1952. However, it was not until four years after its discovery that our Journal first published a clinical report concerning streptomycin; in January 1948, Strazza[13] described the successful use of streptomycin in treating a case of acute *Brucella suis* bacteremia. In November 1948, O'Brian,[14] *et al.* described 9 cases of *H. influenzae* meningitis, of which 8 were successfully treated with combined streptomycin-sulfadiazine therapy.

MISCELLANEOUS

The last fifty years have witnessed remarkable advances in many other fields, of which a few may be mentioned briefly. The many hematopoietic agents, including liver extract and vitamin B_{12} in pernicious anemia, attest to active research in this branch of pharmacology. Transfusions, mentioned briefly by Bastedo,[4] are now routine hospital procedures, thanks to men like Landsteiner and Weiner. The whole group of anticoagulants such as heparin and Dicumarol® were unknown to physicians fifty years ago.

In gastroenterology, the list of antacids and antispasmodics has become formidable. Chemical agents are now available for the treatment of the arthritides, and only a few tropical diseases remain unconquered today. A whole new science of radioactive medicine has grown up to assist in physiologic research and in the ever-increasing battle against malignancy.

ADMINISTRATIVE ASPECTS

With such an accumulation of medical and pharmacologic knowledge, and with such rapid advances in chemistry, many unscrupulous persons have seized the opportunity to victimize the population with extravagant claims of "cures" for every conceivable ailment. The problem of nostrums and medical fakery has always been with us, and probably always will. Unfortunately, some physicians, even outstanding ones, have been duped, and lent their names to the propagation of such schemes. "Krebiozen" is the latest example of this sort of quackery. As long ago as 1820, when the first edition of the U. S. Pharmacopeia was published, an effort was made to provide physicians with a list of reliable approved remedies. This was supplemented in 1888 with the publication by the American Pharmaceutical Association of

the first edition of the National Formulary, a 157 page book subtitled, "Unofficinal Preparations." In 1905 the American Medical Association organized its Council on Pharmacy and Chemistry to investigate medicinal preparations offered to physicians. In 1909, "N.N.R." —New and Non-Official Remedies, was published for the guidance of doctors in respect to proprietary drugs.

Legislatively, the prescription of narcotics is controlled by the Harrison Narcotic Act, and the manufacture and distribution of other drugs is covered by the current Food, Drug and Cosmetic Act. This was passed in 1938 to replace the original act of 1906, and has recently been modified to enumerate in detail those drugs which can be sold over the counter and those which require a physician's prescription. In addition, the individual states have passed laws controlling the distribution of drugs on a local level.

NEW JERSEY'S CONTRIBUTION

During the past fifty years, the State of New Jersey has not been idle in matters pertaining to pharmacology.

Although Waksman's discovery of streptomycin has been our major contribution of recent years, this state has always been active in pharmacologic research. A high level of research activities is always present in the laboratories of our major pharmaceutical manufacturers, who have produced such drugs as isoniazid, Roniacol®, cortisone, to mention but a few. Our hospitals are the scene of clinical investigation to an intense degree, as attested by the many articles which appear in this JOURNAL asserting or denying the efficacy of this or that drug.

Educationally, the Rutgers University School of Pharmacy enjoys an enviable reputation as a source of fine pharmacists. The New Jersey Pharmaceutical Association is an active group, and its efforts insure a high standard of drug dispensing throughout the state. New Jersey pharmacists are noted for their courtesy and cooperation with physicians, and there is a minmum of friction between these two closely allied professions.

Perhaps the outstanding contribution of New Jersey to the field of pharmacology is the large number of manufacturing pharmaceutical houses located in this state. These manufacturers are among the nation's largest, oldest, and best established, and their research efforts and manufacturing skills have been of untold benefit to mankind. Their mass production of fine pharmaceuticals has been responsible for bringing the latest therapeutic advances within reach of everyone who needs them.

The following manufacturers are listed in the 1953 edition of *Physicians' Desk Reference*:[15]

A.C. Barnes Company, New Brunswick
Bilhuber-Knoll Corporation, Orange
Chatham Pharmaceuticals, Incorporated, Newark
Chilcott Laboratories, Incorporated, Morris Plains
Ciba Pharmaceutical Products, Incorporated, Summit
The Harrower Laboratory, Incorporated, Jersey City
Hoffmann-La Roche, Incorporated, Nutley
Maltbie Laboratories, Incorporated, Newark
Merck and Company, Incorporated, Rahway
Organon, Incorporated, Orange
Ortho Pharmaceutical Corporation, Raritan
Reed and Carnrick, Jersey City
Schering Corporation, Bloomfield
Smith, Carroll Dunham Pharmacal Company, New Brunswick
Wallace and Tiernan Products, Incorporated, Belleville
White Laboratories, Incorporated, Kenilworth

Other New Jersey firms not listed in this publication are:

Day-Baldwin, Incorporated, Newark
R. W. Gardner, Orange
Johnson & Johnson, New Brunswick
Mennen Company, Morristown
Sandoz Pharmaceuticals, Hanover
E. R. Squibb & Sons, New Brunswick

THE FUTURE

The past fifty years have seen many major advances in pharmacology and related subjects. Not only have old preparations been re-evaluated and expanded in their usefulness, but progress has been made in the development of new therapeutic principles and drugs, and in the manufacture and distribution of these products. New standards of investigation and control have been evolved, and the physician of

today can be sure that as long as he prescribes officially recognized preparations, his patients will be protected to the limit of human ability from impurity, toxicity, ineffectiveness, and dosage instability. Mishaps will occur, new drugs are more potent physiologically and hence more toxic in their side effects, but these will occur less and less often as further preventive measures are taken.

What challenges lie ahead for pharmacology? First and foremost will be unceasing research for new and better forms of drugs presently available, and for new and more effective agents against diseases which are at present "controlled," but not cured.

However, several uncharted areas will engage the attention of pharmacologists of the future. In spite of the millions spent each year in cancer research, malignant diseases remain a source of high mortality. Chemical means of curtailing the toll from this source will undoubtedly be found and made generally available. Already a nibble has been made, with such drugs as Aminopterin® and the nitrogen mustards, inadequate as they are at present. Radioactive chemistry offers another fertile source for advance in this field.

Control of chronic diseases is engaging the attention of more and more people, including not only physicians but social workers and rehabilitation workers. Undoubtedly chemical control of these illnesses will be sought and found. Likewise, problems of the aging process are under intense scrutiny, with special emphasis at present on the metabolic aspects of what was previously considered a "normal" change associated with chronologic survival. If the metabolism of atherosclerosis is understood, how soon will it be before chemical means are found to modify it, just as the abnormal metabolic state of diabetes is now controlled?

Congenital defects have hitherto been considered due to chromosomal alterations beyond human control. However, the discovery that maternal rubella in the first trimester accounts for congenital abnormalities in infants has opened the door to new types of research. It does not seem inconceivable that before long we shall have pharmacologic means for controlling certain congenital diseases. In similar vein, we should soon be able to control hemolytic disorders as erythroblastosis by controlling the anti-Rh agglutinin titer in maternal blood.

An entirely new concept of disease control will arise when we devote our attention to the *etiology* of disease. Today, the control of infection is almost the sole area in which we attempt to destroy the etiologic agent by chemical means. Can we not foresee the day when the etiology of virtually every human disease is subject to attack by medical measures, of which drugs and antibiotics will certainly not be among the least important?

CONCLUSIONS

Progress made in the therapeutic aspect of medicine during the past fifty years has been sketched. No claim is made for an all-inclusive resume of this period. Rather, the highlights have been selected for review. A comparison of pharmacology at the turn of the century with its status today shows that the progress of the past fifty years has been built on scientific principles of physiology already then established. Our era has been one largely of expansion and extension of the heritage left us by our predecessors.

New Jersey has contributed its share to pharmacology in the past fifty years. This has been preponderantly in the field of drug manufacture, but clinical appraisal and original investigation have not been neglected, the latter culminating in the discovery of streptomycin by Waksman in 1944.

Many problems remain for the future. Until the millenium of perfect health for everyone is achieved, medicine will have a never ending challenge. A few fields for exploration have been mentioned, and the possibilities considered.

As long as medicine remains as active and fruitful as it has in its long and honored past, our future will remain secure.

315 West State Street

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INFECTION WITH BACILLUS AEROGENES CAPSULATUS FROM A LION'S BITE*

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The following case occurred at St. Barnabas Hospital on the service of Dr. Hollister.

Edward Thiele. Age 45. Married. Hostler. U. S. Admitted Sept. 10th, 1904.

Previous history.—Always a very strong, robust man. Moderately alcoholic.

Present illness.—While on a visit to Olympic Park menagerie he pushed his arm through the bars of a cage to arouse a sleeping lion, which he had previously owned. His arm was seized by the lion's jaws, which had to be forced open to release his arm. He was immediately sent to the hospital. On admission (8:30 p.m.) he complained of severe pain in arm and was suffering from slight shock: but had lost very little blood.

Examination.—Lacerated wound of right arm extending from 3½ inches below shoulder to elbow, involving the biceps and coraco-brachialis muscles, which were completely severed; the triceps also being slightly lacerated; the median nerve was torn; great vessels intact. On the forearm were seven small wounds involving the flexor muscles, having probably been made by the claws of the lion.

Treatment.—Immediate operation under ether; thorough cleansing of the wounds; suture of the muscles; irrigation and drainage.

Course.—Twelve hours after operation, temperature 101°, pulse 120, respiration 34. Fifteen hours after operation, temperature 104.8°, pulse 130, respiration 36. Examination of the wounds showed boggy areas over the whole arm with an emphysematous crepitation. *No pus* present, but an odor so foul that the whole corridor was almost uninhabitable. This emphysematous condition rapidly extended to the neck, thorax and abdomen. The general condition of the patient became rapidly worse: temperature 105°, pulse and respiration very rapid and death occurred in this condition at 3 a.m. Sept. 12th, about thirty hours after admission to hospital. Diagnosis.—A stained specimen of smear from the wound showed the bacillus aerogenes capsulatus (Gram stain).

This may be taken as a typical case of this infection. The germ is probably more present in human organisms, in the hollow viscera in health, and in any tissues, when injured, than the number of reported cases would lead us to think. Free oxygen is its natural enemy, and other infections with it (as in a wound) favor its destruction.

* J. M. Soc. New Jersey 1:274, May, 1905.

NEW JERSEY'S CONTRIBUTION TO PSYCHIATRIC PROGRESS

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Service to the mentally handicapped in New Jersey up to about 50 years ago paralleled that of psychiatry generally. It can be well understood that a state that had as important a Quaker background as New Jersey would share the concern of the Friends for adequate care and treatment of the mentally ill and evidence of this leadership shows in the record.

In the earliest days the mentally handicapped person who became a public charge without being a public threat was farmed out to a family in the vicinity which contracted for his board and keep. The "patient" was offered at auction and the county paid the lowest bidder for his care. There were some abuses of this system resulting in the assumption of this foster care by the county itself, in its almshouse.

New Jersey was one of the first concerns of Dorothea Dix and the Trenton State Hospital today stands as a monument to her effort to substitute state authority for county care and asylum for almshouse. In gratitude for her service the Trenton State Hospital offered Dorothea Dix its hospitality as its guest in her later years.

In considering the part played by New Jersey in the progress of psychiatry, the advantages of the state should be kept in mind. New Jersey stands today eighth in population in the country. It is a wealthy state, eighth in per capita wealth and has a concentrated population, second only to Rhode Island in density. This, of course, gives it the advantage of economy in the planning and execution of its psychiatric services and should make it possible for the state to keep its hospitals very close to the public. Unfortunately, the absence of total state planning has permitted all of the hospitals to grow to a size which is beyond the ideal of 1500-2000 patients. The fewer state hospitals are thus more remote from the public than would be the case if their size were held to the smaller level.

New Jersey also has the advantage of close proximity to medical centers, which is generally conceded as having a bearing on the ability of a state to develop good training facilities. Only one other mental hospital in the country, the Philadelphia State Hospital, can boast of being within two hours' drive of ten medical centers, an advantage enjoyed by all three of New Jersey's state hospitals.

RESEARCH

The research leadership with respect to the mentally handicapped in New Jersey emanates chiefly from three sources. In the twenties the eyes of psychiatric leaders were focussed upon the studies at Trenton State Hospital of Henry A. Cotton, Sr. These were studies of the importance of infection in producing mental deviations. There are few today who completely reject the importance of the role that infection may play as a factor in disturbing mental balance. Most, at present, give less significance to this factor than did Dr. Cotton, but that is the fate of much research. It is generally agreed that Trenton State Hospital demonstrated that a superintendent need not be limited to the material aspects of administration, but can devote time and effort as well to the scientific aspects of the hospital. This is a contribution that has not been sufficiently emphasized.

In the field of mental deficiency, leadership in the United States in the early part of this century was to be found in a few centers, of which Vineland was one. Goddard introduced the Binet Test to this country and put it through its baptism at the Training School at Vineland. He emphasized the hereditary factor in this problem and in doing so highlighted the sociologic factors before sociologic theory had been well formulated. His successor, Porteus, further refined the maze test which still stands as the instrument of choice in evaluating intelligence and personality.

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More recently, collaboration between Greystone Park and Columbia University has resulted in some carefully worked out and controlled refinements in psychosurgery, specifically known as topectomy.

During the past year the psychiatric research and training function of the state has been given more concrete and permanent expression in the establishment of the New Jersey Neuropsychiatric Institute at the Village for Epileptics at Skillman. In so doing the state has not only followed the trend of the more privileged states in supporting psychiatric training and research, but also has given its sanction to the tendency against segregation of clinical categories—in this case, epilepsy.

A distinctive experimental application of correctional psychiatry is the project Highfields, near Hopewell, started in 1950. Here a selected group of youthful offenders are dealt with as in a small home with minimum security provisions and maximum therapeutic effort. It would be premature at this point to comment on the results of this experiment.

CHILD PSYCHIATRY

Child psychiatry is usually said to date from the beginning of Healy's work in Chicago in 1909. Except for the transfer of Healy's activities to Boston in 1917 there was not very much expansion in this field before 1920. In 1920 Trenton State Hospital began to provide psychiatric services to the state correctional institutions, including Jamesburg. About the same time the Essex County Juvenile Clinic was established under the direction of Dr. James S. Plant and achieved a nation-wide reputation. Dr. Plant considered each of his cases important not only as an opportunity for treatment, but as reflecting the defects of the community that potentially burden all children. His contributions had their impact in the field of medicine. But he is perhaps more widely known for his sociologic contributions and his perspectives in the field of education. He recognized that the chief means of influencing the mental health of children rested not only with the therapeutic facility, but rather with the related community agencies who see the problems earlier and have opportunity to do something about them at their beginnings. Again, about the same time a child guidance clinic was initiated in Monmouth County. This contributed much to our understanding of the problems of providing rural service, in contrast to the urban clinics which had been the main line of development.

Half a dozen years later these experiences with child psychiatry in New Jersey resulted in the development of a rather amazing traveling clinic program attached to the Greystone Park State Hospital. Greystone Park had earlier and in a less formal way carried outpatient clinic service to some communities within its geographic area.

Meanwhile the Newark public schools extended the work initiated by the Essex County Juvenile Clinic into a full-blown psychiatric clinic of their own, now known as the Department of Child Guidance, Newark Board of Education with Dr. Bruce B. Robinson as director. Following the philosophy established by Dr. Plant, this clinic also saw that it was impossible to assume responsibility for all of the problems arising within the school and the necessity of greater responsibility being assumed by the teacher. Consequently, a distinctive aspect of the work of that clinic was the development of the teachers' capacity to carry this responsibility.

For a brief period psychiatric clinic service, chiefly for children, was provided by Somerset County. Meanwhile, other state hospitals developed outpatient psychiatric services in less pretentious ways than Greystone.

New Jersey was among the first states to make provision for special inpatient psychiatric care of children and was a pioneer in the establishment of a separate hospital for this purpose. The first project of this type was a children's unit at Marlboro State Hospital. In 1946 New Jersey led the way in establishing an entirely separate unit—the Arthur Brisbane Child Treatment Center.

MENTAL DEFICIENCY

Reference has already been made to the leadership offered by New Jersey regarding research in mental deficiency. The same qual-

ity of leadership has been offered with respect to administration and philosophy under E. R. Johnstone at Vineland. The motto of the Training School at Vineland "Happiness First, All Else Follows" has spread far and wide. Anywhere in the country today one may encounter a teacher or other person active in mental deficiency who got a start at the summer school at Vineland.

The State School at Woodbine, under E. L. Johnstone, is unique in its concentration on the training of low-grade mental defectives. This work has been impressive in showing how much can be accomplished with the generally undeveloped and under-rated potentialities in this group. Formerly, they were thought of as being not trainable at all.

MENTAL HOSPITALS

It is interesting that not only was Dorothea Dix intimately identified with psychiatric progress in New Jersey, but the one who might be thought of as her successor and founder of the mental hygiene movement, Clifford W. Beers, made his home in Englewood during the greater part of his years of leadership.

One important concept which has been more highly developed in New Jersey than in most other states has been the effort to hold the responsibility for the mentally ill as close to the grassroots as possible. The development of the Monmouth County Organization for Social Service provided an instrument whereby it was possible for the hospital to understand the conditions under which its patients broke down mentally, and to keep in much closer touch with former patients than could have been achieved only by social service specifically attached to the hospital. At the same time it was possible to integrate the interests of the hospital in the former patient and his family with interests emanating from other community agencies—thus reducing the complexity of the approaches made to the family from the community.

In one respect psychiatry in New Jersey has lagged rather seriously. Except for Wisconsin, no state in the Union cares for its mentally ill as extensively in county hospitals as does New Jersey, where approximately half as many are now cared for in the county as in the state hospitals. However, a sharp distinction must be recognized between those county institutions, such as Essex, which compare well with our better state mental hospitals and those which are essentially remnants of almshouses with no consistent psychiatric equipment and in fact no advantage in economy.

Public psychiatric services in New Jersey have never really developed into a state system. They are still conducted as the fairly independent services of three districts, each the territory of a state hospital. Evidence of a system of public psychiatric service in a state is seen in the movement of personnel from one hospital to another as the opportunity for advancement appears. By this test it is evident that a system of psychiatric service in New Jersey is still to be developed.

A current effort to deal more effectively with youthful offenders is the Diagnostic Center, dedicated in 1949, at Menlo Park, where a wide range of professional approaches is available for as thorough an understanding of each case as science today can afford.

PSYCHIATRISTS

The number of psychiatrists in New Jersey has increased steadily over the past 50 years. In 1908 the state could boast of only 20 members of the American Psychiatric Association which at that time included a total of 466 psychiatrists. The increase, however, has been predominantly outside the state and county institutions. In 1908, 11 of the 20 psychiatrists were in such institutions, whereas currently there are only 45 out of the 191, with 28 in federal hospitals, and 118 in clinics, private practice and other locations.

It is significant that as of March 1, 1953, the Veterans Administration in Washington has announced a policy of close working relations and assistance to the state services. However, our psychiatric hospital at Lyons anticipated this policy by leadership in its generous attitude toward the other hospitals and the communities of the state. It has, for example, opened up its lecture and other educational programs to practically all appropriately interested persons outside its own staff.

The development of the New Jersey Neuro-

psychiatric Association represented the first consolidation of interest of psychiatrists in New Jersey and currently provides a voice for the profession that is having more and more impact on the psychiatric service provided to the people of the state. Out of it has come the District Branch of the American Psychiatric Association which provides an official voice to psychiatry throughout the country.

Since the second World War great advances have been made in the United States in psychiatric post-graduate education, and the standards and expectations of a training center have been greatly increased. A state which merely holds its own is relatively receding. New Jersey has lost the approval for residency of two of its three state mental hospitals. It has potentialities far beyond such an unenviable record.

MENTAL HEALTH ORGANIZATIONS

The development of a state mental health association in New Jersey has been slow in spite of the leadership in the state. For years the State Teachers Association through its mental hygiene committee represented the only consolidated citizen interest of this sort and efforts to extend it to include other than teachers proved unsuccessful. A small mental hygiene committee advisory to the State Department of Institutions and Agencies has never been a really effective medium of citizen influence, but the assumption that it could perform that function has been in part responsible for the tardiness in the formation of a sound citizen organization. One other focus of citizen interest in the state has been the New Jersey Health and Sanitary Association which, however, has never developed the strength in the field necessary to meet the needs.

In the past few years, however, a more adequate state mental health association and a number of county associations (Union, Atlantic, Monmouth, Essex, Bergen, Burlington, and Paterson and vicinity) have been developed.

PUBLIC HEALTH

The development of the psychiatric element in public health was for the most part limited for a time to the child health field where an effort has been made to establish the concept that breakdown in mental health on the part of a child or his family represented a failure of prevention and unsuccessful conclusion of the effort of the public health centers. A most significant step has been the recent development in Hunterdon County. There psychiatric and mental health activities have been united intimately with a health and medical service program with anchorage in a new county general hospital.

PEDAGOGY

Schools and teachers' colleges in New Jersey have given real national leadership in the field of mental health. Newark, Trenton and Montclair have stood out in this respect and the Newark Teachers' College employed a psychiatrist of the Newark public schools to give psychiatric service to students and related counsel to the college. It has also been unique in enriching the mental health aspect of its curriculum by having a psychiatric social worker as a regular faculty member. This college has been guided by a concept of emotional maturity emanating from psychiatric work. Clinical services have also been available at Montclair State Teachers' College where the leadership of Dr. Caroline Zachry secured for that college nationwide attention. This college also worked closely with Dr. James S. Plant of the Essex County Juvenile Clinic.

At the Trenton State Teachers' College experiments have been carried on designed to bring psychiatric and other mental health experiences into the selection and guidance of students. Early in the war, Dr. Donald Hastings, now professor of psychiatry at the University of Minnesota, participated in this experimental work at Trenton. It is something of a reflection, however, upon the state that it did not make greater effort to retain for leadership in its educational program a former eminent citizen, Dr. W. Carson Ryan, who is the author of "Mental Health Through Education" and now Kenan Professor of Education at the University of North Carolina.

MILITARY DEVELOPMENTS

Early in the second world war one of the military installations in New Jersey cooperated with the National Association for Mental Health in a project designed to show that warnings of mental breakdown were detectable at the time of induction into armed services. This consisted of a retrospective study of cases discharged for psychiatric reasons. The findings of this study had a strong impact upon Selective Service in eventually establishing a process of gathering history in the evaluation of recruits—a procedure known as the Medical Survey Program. In addition and in anticipation of the Medical Survey two experiments were carried out—one in Essex County and the other in Monmouth County—in actually conducting a survey of men being inducted into the service, thus showing the feasibility of gathering and using histories. Likewise, it was at Fort Monmouth that the first mental hygiene clinics were established in army installations. Not only was the clinic shown to be a valuable clinical instrument, but through experimentation in the use of clinical psychologists and psychiatric social workers the team pattern was developed which later was used more extensively in the armed services. This culminated in the commissioning of personnel in these two categories.

CONCLUSION

The extent to which New Jersey has provided leadership in the psychiatric field is impressive. But it is impressive also that there was so much chance rather than design in the production of this leadership, that part by part it came and went. It is evident that the state has potentialities for leadership and growth that almost force it into action. One cannot fail to be impressed that with more design many of the gains that have faded might have been retained and its leadership might have been better preserved and new contributions produced.

1790 Broadway

ANOTHER CASE OF OFFICIAL INCAPACITY*

The ceiling of the drug room in the Jersey City Hospital fell the other night, wrecking the stock of medicines and greatly alarming the patients.

The building is said to be old and out of repair and plans have been prepared for a new one. Commissioners, presumably to superintend the work, were appointed under an act of the legislature. A dispute, however, arose over the plans, and although a contract for the new structure was awarded this action was not concurred in by the board of finance.

If a ceiling should fall in a ward and kill some of the helpless patients and the city should have to defend a number of damage suits for needless loss of life and limb, perhaps the disputes over the plans could be settled and the proper building erected.

By the way, where is the inspector of buildings in Jersey City, or the official, or the board that ought to inspect this building and condemn it? Are they so busily engaged in this dispute over the plans for the new building that they have no time to inspect the old one?

* Editorial. J. M. Soc. New Jersey 1:115, December, 1904.

FIFTY YEARS OF PROGRESS IN PUBLIC HEALTH

Daniel Bergsma,* M.D., Trenton, N. J.

Anniversaries are usually pleasant enough occasions, affording friends an opportunity of paying their compliments and recognizing the accomplishments of past years. Even a golden anniversary can be a pleasant occasion when the celebrant is as hale and hearty as The Journal of The Medical Society of New Jersey.

We can all join with the Society in taking pride in the accomplishments which fifty years of continuous publication have achieved. All of us in New Jersey owe a debt of gratitude to the men who have served as editors of The Journal, to the men who, over the years, have contributed the products of their research, study and thinking, and to the many people, who have so patiently and accurately assembled the copy for each issue, have read the proof and have seen that the issue is not only published but mailed on time. The regular publication of such a journal requires the day by day participation of a large group of people and it is this group of New Jersey physicians and associates to whom we are indebted for the first fifty years of The Journal.

To review the advances in medicine and public health which have been made during the lifetime of The Journal would be a task of large proportions and it is not one which I plan to embark upon at this time. We should note, however, that The Journal has made a continuing and vital contribution to this progress.

It is in the nature of such anniversaries as this to look backward over the road which we have travelled and to regard our present position as the peak of our accomplishments. This is, of course, a nice enough thing to do and it does provide us all with certain satisfactions and the feeling of a job well done. Such an anniversary, however, can also be used as a vantage point for looking toward the future. The life of The Journal coincides almost exactly with the present century, in which we stand at approximately mid-point. I would not have the temerity to prophesy what advances will be made in public health during the second half of this century, and what achievements will be hailed when The Journal celebrates its one hundredth anniversary. I would, indeed, be hesitant even to prophesy what may develop in the fields of public health and preventive medicine during the next twenty-five years. I do think, however, that we can, with some assurance, consider what some of our advances have been in public health during the last fifty years and on the basis of this progress we can make a fair estimate of what our progress, or at least our objectives, should be during the next few years.

Advances of the Past Fifty Years

Public health has made significant advances during this fifty-year period. In fact, most of what we consider today to be public health has been developed during this period. At the beginning of the century we were, for the most part, in the pioneering days of public health. We had reliable medical and scientific information about some of our health problems. We knew less about some others and there were some health problems of 1900 about which we had very little or no knowledge. Not only have there been advances in preventive medicine but there have been many complex developments in the methods of public health.

Our vital statistics in 1900 were crude, incomplete and unreliable when compared with the statistical information available today. The classification of the causes of death, under the international system, was adopted in 1901. In contrast with this early beginning is the revised medical certificate of death in use today, which provides a wide range of information for us about the immediate and contributory causes of death in New Jersey.

Our methods of gathering, of tabulating, of analyzing and of publishing our vital statistics have greatly changed during this fifty years in order to meet the changing demands of public health, for the statistics of morbidity

* State Commissioner of Health.

and mortality form the very basis of our planning.

Many of the articles which have appeared in The Journal during this period have been based upon statistical information gathered by the State Department of Health from the virtually daily reports of the physicians of New Jersey, for the physician is the ultimate source of most of our vital statistics. As public health has become more complex, we have depended in greater measure upon statistics for guidance in the planning and administration of our preventive program and it seems safe enough to assume that during the years ahead our dependence upon statistical methods and information will increase.

SANITATION NEEDS

Environmental sanitation was one of the earliest, if not the earliest, branch of public health. The dirt and offal of the cities and towns of the last century made itself obvious by sight and smell, and by the vermin bred in these accumulations. Its very obviousness, coupled with the folklore beliefs that communicable diseases could arise spontaneously from such materials, brought about a demand for cleaner communities. When The Journal had its start, we in New Jersey were beginning what was to become a vast and productive project of providing safe drinking water, adequate sewage disposal, clean streams, safe food and milk, pure and wholesome drugs, sanitary disposal of garbage and trash — in fact we had started the job of providing a healthy environment for the people of New Jersey. The amount of work and the millions of dollars which have been expended in these efforts cannot be totaled. The savings of lives as a result of these community sanitation measures are great but cannot be measured accurately. The elimination of malaria as an endemic disease in our state through control of the anopheles mosquito, as a single example, has made life healthier, more productive and longer for many of our citizens.

To recount the advances which we have made as a result of environmental sanitation is almost an impossible job. We can point it up, however, in a single question—how many cases of epidemic typhoid fever did you treat last year? Or similarly—how many cases of malaria do you have in your practice today?

While we have made much progress, we have not yet reached our ultimate goal of a clean and healthy environment for all. Rapid growth of our state has increased its need for sanitation facilities beyond our present capacity and we have large numbers of our people who live in towns without adequate sewage disposal or without proper garbage and trash disposal or who live near streams which are heavily polluted. There are always new problems in sanitation. What about the sanitation of our new and rapidly growing frozen food industry? What about the sanitation of automatic food vending machines? What about changes in milk handling and processing methods, such as high temperature, short time pasteurization, in-place cleaning of milk lines or bulk storage and shipment of milk?

Pollution of our streams is a familiar problem to us but pollution of the air around us has been increasing during the last decade. We are beginning to make progress in air sanitation but we have much to do in research, in study, in the establishment of standards, in methods of testing and in methods of enforcement of air pollution control measures. Control of ragweed and other noxious weeds in our environment will bring relief to many of our people and some of our communities are working toward this goal.

What is to come in this great field of environmental sanitation? We must continue our present protective measures in all fields of sanitation while we continue to push forward our work in such fields as air pollution and the use of radioactive materials in manufacturing processes. Environmental sanitation, which served as the beginning of public health, is today an important part of our health protection and in the years to come will be of vital significance in maintaining the health of our communities.

COMMUNICABLE DISEASE CONTROL

Communicable disease control has been a large part of public health. Here again we have made such great advances during the

fifty years, that it would require a lengthy and involved report even to summarize the advances. The quarantine and isolation police measures of the early part of the century have given way in many communicable diseases to preventive measures. Here we have a basic demonstration of the work which the family physician has done in protecting and improving the health of his patients, for in communicable disease prevention, every doctor's office is a health center.

Not only have methods of prevention reduced our communicable disease toll but new and improved methods of treatment have been developed, particularly, of course, new forms of chemotherapy and the antibiotics. Advances in this field have been so rapid and so recent that one almost hesitates to write of them for fear the paper will be obsolete before it can be published.

Our entire system of public health control of venereal disease has changed sharply, not once but several times in the past few years, as a result of the development of new methods of treating venereal disease. The venereal disease patient has, in fact, returned to the private practitioner and the work of the health department is no longer one of providing treatment but the larger community job of case-finding through applied epidemiology. Looking back over this period of years there comes to mind changes in the therapy of the pneumonias. For a brief time the State Department of Health provided as many as thirty-two different types of pneumonia serum for the family physician, but further developments made this service no longer necessary.

In communicable disease control we can never rest on our laurels for infection is always present waiting for the community to lower its guard. If we but lower our rate of diphtheria immunizations we would once more have the severe epidemics which occurred during the years when THE JOURNAL was being founded. We must always continue our preventive measures in the communicable diseases and on the basis of the past years we can look forward to further advances in some of the communicable diseases which today are still a threat to the health of our state.

I cannot make so satisfactory a report on our present achievement in the control of tuberculosis. This communicable disease is still one of the leading causes of death in New Jersey. We have a morbidity and mortality rate higher than some comparable states and certain of our cities and counties in New Jersey have rates in excess of what should be expected. We must continue the process of looking at what we are doing in tuberculosis control and evaluating our results if we are to achieve the savings in lives which can be ours by applying our present knowledge and technics in the control of tuberculosis.

PUBLIC HEALTH LABORATORY SERVICES

The public health laboratory is an indispensable part of the health service of a community, not only for the health department but for the practicing physician as well. When THE JOURNAL was established the total number of specimens of all types tested in what was then known as the state laboratory of hygiene was a little over 10,000 per year. For the most part these were diphtheria smears, tuberculosis sputa, blood for malaria and feces and urine for typhoid fever with a smaller number of samples of foods for analyses. Today the services rendered by the laboratories of the state department of health and the public health laboratories of our local health departments are far in excess of these numbers.

In our own departmental laboratory in recent years there has been an increased volume of serology work as a result of the blood typing and blood grouping program of the Department of Civil Defense. In accord with our intention to do everything possible to strengthen the tuberculosis control program in New Jersey, there has been increased emphasis on the identification of the tubercle bacillus by culture methods and it is anticipated that routine culturing of all specimens suspected of containing the tubercle bacillus will be done.

A survey of the fluoride content of some 400 of New Jersey's public water supplies was begun in April 1952. When completed, this study will provide important basic information for the promotion of the fluoridation of public water supplies in New Jersey.

Laboratory services have been used in the support of the industrial health program of the department in three important phases: in-plant industrial hygiene, neighborhood air pollution and radiologic monitoring. During the past year, emphasis has been given to the development of technical aids for professional education in the diagnosis of cancer and allied diseases. The pattern of this program, which was established in previous years, has been followed with an increased participation by the pathologists of New Jersey. Visual training for pathologists through tumor tissue slides, photography of gross specimens and microphotographs has been developed with a high level of professional competency. The employment of a histologist specially trained in the field of medical photography has greatly facilitated this work.

Public health laboratory services are now such integral parts of preventive medicine and public health that we must anticipate and plan for their further growth and development during the years to come. From these laboratories will come the control methods and measures for many of our problems in environmental sanitation and in communicable disease control.

MATERNAL AND CHILD HEALTH

A review of The Journals of the last fifty years shows that a large percentage of the papers has been devoted to the interest of maternal and child health. At the beginning of this century our high maternal and infant death rates were accepted by most people as an unavoidable part of living and had our present-day rates been prophesied in the original issue of The Journal, most physicians and public health workers of that day would not have believed it possible.

We can take justifiable pride not only in the advances that we have made but in the fact that much of the pioneer work in this field has been done here by New Jersey physicians. Our state is now one of the safest places in the world for a mother to have her baby and for a child to be born. We have also made good progress in the health of our children. These advances cannot be credited to any one group but have been achieved through the team effort of many people: the family doctors, pediatricians, obstetricians, public health nurses, the physicians who have staffed the well baby clinics over the years, health officers, and the parents of our children.

We still have ground to cover in child health. Further reduction of our infant mortality rate can be achieved if we reduce the death rate of prematurely born infants. As a part of this endeavor, a program of training in the care of premature infants for nurses has been developed and put into action during the last year. Dental caries may in time be greatly reduced by the addition of fluoride to our public water supplies. Better nutrition for our children will build better health.

New Jersey was a pioneer in recognizing the need of good parent-child relationship in the early years of life to achieve good mental health in the adult years. Mental health is a field of preventive medicine which we have just begun to explore. It offers opportunities for research and study during the coming years, and when The Journal celebrates its 75th year of publication preventive mental health will be a part of every health department program just as today it is already an integral part of the work of some of our health departments.

CHRONIC DISEASE—A PRESENT CHALLENGE

As these achievements of the last fifty years have been made in environmental sanitation, in communicable disease control, in maternal and child health, our needs have shifted at the same time and we find ourselves with higher and higher morbidity and mortality rates from the group of diseases which we have labeled chronic. There is now general recognition that as the proportion of older persons in our population increases, the rate of persons having chronic illness will also continue to rise.

This great increase in the chronic diseases, coupled with the development of certain preventive measures for some of them has made them a part of the public health program. Whereas deaths from chronic diseases were considered to be little more than a statistical record fifty years ago, today they present an impelling challenge to every health department.

This year will stand significantly as the time when we made a new approach to this complicated problem of long-term illnesses and premature deaths from chronic diseases. One out of every six persons in New Jersey suffers from a chronic illness. Half of these are under the age of 45 and 17 per cent are under 25. Two-thirds of our deaths are caused by chronic illnesses. This is a public health problem of the first magnitude, and it is a problem to which we must address ourselves during the next decade. As a result of the recommendation of the Temporary Committee on the Chronic Sick, appointed by Governor Driscoll in 1949, the Prevention of Chronic Illness Act was passed by the State Legislature in 1952, which provided for the creation of a Division of Chronic Illness Control in the State Department of Health. This Division was established in accordance with the Act on July 1, 1952, and the already existing bureaus and programs in the field of chronic illness were brought together in the new division, within the Department. The Governor's Conference on the Prevention of Chronic Illness, which was held at Trenton in December 1952, has helped chart the way for the work of the next few years in the public health aspects of chronic illness.

WIDER PARTICIPATION BY PHYSICIANS

Health education has always been a part of public health and it has been a productive tool in the hands of physicians and public health workers for many years. The methods and technics have changed not only as public health problems have changed, but also as study and research in methods of education, knowledge of how people learn, and what motivates their actions have increased. Whereas, fifty years ago health education was devoted primarily to giving information to people on the premise that the possession of the proper facts would necessarily lead to the indicated action, the emphasis of health education today is on helping people find and meet their own health needs. Throughout these years the medical profession has made a major contribution to health education work in New Jersey.

Today as health committees, health councils and other groups of people in our communities are being formed to study their health needs, the medical profession is playing its part in providing leadership, professional advice, financial support and active participation. There is every indication that in the years ahead we will make more and more use of this tool of health education in public health and the physicians of New Jersey will play an ever-increasing part in its implementation.

LOCAL HEALTH SERVICE NEEDS

The provision of local health services by the people in their own communities remains today one of the primary public health problems of our state. In this period of fifty years we have tried many methods of securing adequate local health services for all of our people. Starting with our law of 1887 we were bound to a system of health departments on a municipal basis, regardless of the population of the various municipalities, with the result that most of our municipalities and townships have too small a population to support adequate local health services. To meet this need we have tried joint employment of personnel by adjacent communities; we have tried regional health commissions under our regional health act of 1938; and in 1951 the State Legislature passed, with the support of The Medical Society of New Jersey, the Local Health District Act, which makes it possible for municipalities to join together in forming consolidated local health districts, comprising part of a county or all of a county.

The medical profession, together with other public health professions and large numbers of our citizens, are acutely aware of our need to improve local health services in many parts of the state, particularly in the rural and small town areas where services are either inadequate or almost totally lacking. This is one of the challenges of public health today. We cannot stand on a pinnacle today looking back over fifty years of progress, for while we have made much progress in the provision of local health services, the road ahead is still so long that it outbalances the very progress we have achieved to date. This is a task of large proportions. It is not one which will be solved by the passage of an act, the voting of a resolution, or the for-

mation of a health council. It will require the active support of all of the people and of all health organizations, including our state and county medical societies, before we can begin to point with pride to our accomplishments in this field.

Fifty years is a long time in our human way of thinking. It measures approximately the productive years of an individual's life and our present rate of accelerated progress in so many fields makes fifty years of time appear to be almost epochal. To look fifty years ahead with any degree of accuracy seems an impossibility. We can look ahead though with confidence, based on our achievements of the last half century, and if we do as well with our present problems as those who went before us have done with the problems of fifty years ago, we need not fear the reckoning when The Journal celebrates its first century of service in New Jersey.

THE HEALTH STATISTIC OF THE STATE*

According to the 27th annual report of the New Jersey State Board of Health, the death rate for the entire State was 15.91 per 1,000 inhabitants for the year 1902, which is the lowest figure for any year in 24 years, with the exception of 1898.

The population of the State in 1902 is given as 1,967,893 and the yearly rate of increase in population during the past 20 years has been 37,639 or 2.5 per cent.

At this rate the present population numbers 2,035,360—of which nearly half live in Essex and Hudson counties.

The total number of deaths was 31,319 of which 3,019 or about 10 per cent, were due to consumption, 2,421 were due to pneumonia, and 1,878 were caused by diarrhoeal diseases of children.

Diphtheria carried off 683 persons and smallpox 432. Typhoid fever is next on the list with 428 victims, and scarlet fever, whooping cough and measles each caused over 200 deaths.

Of 41 New Jersey towns having over 5,000 inhabitants each, West Orange had the smallest death rate in '02, viz., 10.27 per 1,000, and Long Branch had the largest, viz., 21.50. It must be borne in mind, however, that summer resorts like Long Branch have a large floating population, amongst which are many invalids, so that the high death rate is not fairly chargeable to the town.

The small and gradually diminishing death rate is highly creditable to the State and to its sanitary authorities.

Of the 31,000 and odd deaths, 9,597 or nearly a third, were caused by the more or less preventable diseases. There is, therefore, every reason to expect a still further reduction in the annual death rate as the health boards become more efficient and the people become better educated in matters of hygiene and sanitation.

In one class of diseases especially, a gratifying reduction of the death rate is reported, viz., in the diarrhoeal diseases of children. For '02 the rate was 9.54 per 1,000, while from the 20 years from '79 to '98 the average yearly rate was 21.46 per 1,000. In the words of the report itself, "the number of deaths among children under 5 years of age is one of the recognized tests of the degree of civilization attained by any given community, and it also indicates to some extent the degree of efficiency which has been attained in the local sanitary administration."

Judged by the rule just enunciated, New Jersey may justly pride herself on her advancement in civilization and on the efficiency of her health authorities.

* Editorial. J. M. Soc. New Jersey 1:55, October, 1904.

REHABILITATION IN NEW JERSEY

Henry H. Kessler, M.D., Newark, N. J.

Lucy, an attractive young woman in her early twenties, was first seen when she was a patient at the city hospital. A tumor of the spinal cord had left her paralyzed from the waist down, and for three years she lay in a hospital bed, unable to walk or even use a wheelchair, and entirely unable to look after her personal needs. Plans were being made to send her to the poorhouse.

To the protest that this was no place for a twenty-two year old girl who could be rehabilitated, it was explained that Lucy occupied a bed that could have been used for thirty or forty acute cases. The author volunteered to teach this girl to walk and earn her living at a rehabilitation center.

At the rehabilitation institute, she received a complete program of physical restoration which enabled her to ambulate on braces and crutches. Her bed sores were healed, she learned to care for her personal needs, and finally she was pronounced ready for vocational training. Tests had revealed her interest and aptitude in the field of photo-coloring and retouching, and it was arranged for a teacher of this trade to come to the center and instruct Lucy. Shortly thereafter, she was discharged from the center and immediately found an excellent job with a large photographic studio.

Today Lucy lives independently in her own apartment, going to and from work, and leading, if not a normal life, at least one that is consistent with her abilities as well as her disabilities.

The story of Lucy is an example of rehabilitation in the modern age. As such, it is the culmination of over thirty-four years of combined effort on the part of the medical profession and auxiliary aids in salvaging the physically handicapped and finding a useful place for them in society.

In the State of New Jersey, the evolution of this practice began in 1919. Prior to that time public opinion had become definitely crystallized as to the needs of the physically disabled, but it remained for private agencies to point the way to a constructive solution of the problem. Among these organizations were the Institute for the Crippled and Disabled in New York, the Cleveland Association for Crippled and Disabled, and the Service League for the Handicapped in Chicago. For the most part the activities and functions of such agencies consisted of securing treatment and finding employment for the physically disabled and occasionally providing artificial appliances and special work opportunities for them.

The realization on the part of the public that the physically disabled needed more than workmen's compensation was given expression in the form of legislation in September, 1918. Three months after the passage of a soldier rehabilitation act, a bill was introduced in the House of Representatives by Representative Bankhead, promoting the rehabilitation of persons disabled in industry or otherwise and their return to civil employment. This bill became a law June 2, 1920.

In the meantime the states were also busying themselves with similar legislation; Massachusetts was the first to take legislative action and on May 28, 1918, the governor of that state approved an act providing for the training of persons whose capacity to earn a living had been destroyed or impaired by industrial accidents. Nevada was the second state to enact similar legislation on March 28, 1919, and North Dakota also passed a rehabilitation act incorporated as a provision of the state workmen's compensation law on March 5, 1919. However, the rehabilitation section of the North Dakota law never became effective.

The evolution of rehabilitation in the State of New Jersey had a slightly different course. The Red Cross Institute for Crippled and Disabled in New York, which was founded for the purpose of research and demonstration in the field of rehabilitation in 1917, came under the leadership of Douglas E. McMurtry in 1918. It became an active agency in the promotion

of state rehabilitation legislation. A model rehabilitation bill was prepared which was followed by some of the other states in drafting their own laws. This bill, practically in its original form, was enacted by the Legislature of New Jersey on April 10, 1919. The act created a special commission to carry out a very comprehensive program embracing all phases of rehabilitation work with special emphasis on physical restoration.

On September 9, 1920, the local laws of the state were amended to effect the acceptance of the federal act. This amendment provided also for a joint plan of cooperation between the rehabilitation commission and the state board for vocational education, whereby the latter would be responsible to the federal government for carrying out the provisions of the national act, and the former for the actual operation of the rehabilitation program.

To carry out the provisions of the New Jersey rehabilitation act, a clinic was established at 9 Franklin Street, Newark, which was the first of five. Others were established later in Jersey City, Paterson, Trenton and Camden. Dr. John Nicholas Bassen was the first medical director of the state rehabilitation clinic, followed by Dr. Edgar Hosen, Jr., and later the author. These clinics at first were attached to the Workmen's Compensation Bureau and served in the dual capacity of evaluating permanent disability in industrial accidents and selecting those patients with permanent disabilities who might be benefited by rehabilitation technics and the rehabilitation program.

The clinics were equipped with apparatus to serve as an outpatient physical therapy department to provide those physical restoration measures which would improve function after fractures and similar injuries. For the first few years attention was directed primarily to the accidental injuries of industry; later a wider scope of disabilities was managed in these clinics. The physical restoration phase was one part of a broad program which included not only treatment of these severely disabled but also preparation for employment by means of vocational guidance and training. For that purpose a staff was developed which would provide an integrated service of physical restoration, vocational guidance, training and finally selective placement in employment.

A prime mover and stimulus to the development of this program was the chairman of the rehabilitation commission, Dr. Fred H. Albee. Dr. Albee was an internationally famous orthopedic surgeon who was concerned with the problem of rehabilitation in the Army and was in charge of the one institution at Colonia, New Jersey, during World War I, which devoted itself exclusively to the rehabilitation of the disabled soldier. From the inception of the commission until 1946, Dr. Albee served as the chairman of the commission and also as the representative of the medical profession on the commission. He helped shape its policies and bring it to the high estate which it achieved.

The story of Lucy illustrates, also, the culmination of the evolution in attitudes as well as practices and technics of the medical profession. At the time of the establishment of the rehabilitation commission in 1919 the general attitude of the profession toward rehabilitation, which was a comparatively new word, was that expressed by the term "cure." By the word "cure" or "rehabilitation" they meant the administration of those physical, medical and surgical measures which would relieve the patient's symptoms, restore his function and restore him to his family and to his workplace.

In pneumonia the administration of antibiotics relieves not only the patient's symptoms, but his function is restored, and in a week or ten days he is returned to his job and to his family. So it is with appendicitis: after surgical removal of the appendix, the patient's symptoms are relieved, his function is restored and he returns to his family and his job.

However, when a patient is the victim of an amputation, a hemiplegia, a paraplegia or a progressive and dynamic neurologic disease, the completion of specific medical or surgical care does not relieve the patient of his disabling symptoms. He thus requires auxiliary treatment in order to enable him to return to his family, his job and his workplace. These auxiliary services have been recognized as a

distinct entity and have been frequently referred to as the third phase of medical care. However, rehabilitation has a much wider connotation than this. It refers to the totality of acute treatment as well as supplementary treatment which will assist a man in returning to employment. The story of Lucy is an example of what we mean by total rehabilitation. This modern concept can be illustrated again through additional case histories.

Ben C., a coal miner, suffered total paraplegia as a result of a rock fall in the mine where he was working. His legs were injured so badly that both had to be amputated at the hip. When this patient was seen he was, at the age of nineteen, a paralyzed double leg amputee, addicted to drugs, and suffering from extensive bed sores and the numerous other ills that often accompany paraplegia.

A complete program of physical and vocational rehabilitation was planned for this severely disabled patient. The entire rehabilitation team—doctors, nurses, physical therapists, occupational therapists, and vocational counselor—pooled their skills to achieve a remarkable degree of adjustment. The patient was, with psychiatric assistance, weaned from his dependence on drugs. Intensive exercising developed the power in the torso necessary for ambulation on two artificial legs and crutches. The plastic surgeon repaired the extensive decubitus ulcers, and good nursing care restored his general health. Ben was trained to do factory inspection work and, after discharge, found a satisfactory job. He married his nurse, and they are now living happily in their own house in Ben's home town, where they are both employed.

Lucas C. of Greece came to the center with an extremely severe, and by no means infrequent, combination of disabilties: he had lost both arms and his sight in both eyes during the guerrilla warfare in his country. When he was first seen by our staff, his physical disabilities were complicated by psychologic ones, such as a too-strong attachment to his mother.

A cineplastic operation was performed on the patient's right stump which enabled him to use a prosthesis offering considerable versatility and control. On the left stump, a Krukenberg procedure was performed. This operation, which splits the forearm into two finger elements, provides a degree of prehension without impairing the tactile sensation which is necessary for a blind person. A teacher from the state commission for the blind came regularly to teach the young man braille and orientation. Now, his rehabilitation complete, Lucas has returned to his own country and has acquired a considerable measure of independence.

Another patient was a young girl who had been paralyzed in both legs after an attack of poliomyelitis. Jacqueline G., who was a college student before her illness, responded very well to an integrated program of rehabilitation, and learned to ambulate on braces and crutches. With the cooperation of the telephone company, she was taught to operate a switchboard and later one was installed by the company in her home in Atlantic City. She now operates a very successful answering service for professional people in her area.

Freddie T. was first seen when he was about a year old, at a free clinic for congenital amputees held at the center. The child was born entirely without arms or legs. The young mother summed up her fears and hopes in three pertinent questions which she presented to us at the clinic: Was this my fault? What can be done to help my child? Shall I have more children?

We were able to give her a reassuring answer to her first question by explaining that she could not in any way be responsible for this misfortune; it was a biologic sport, as much of an accident as crossing the street and being struck by a car. In answer to her second question, we explained that we had partial answers: a paraplegic double leg amputee had been taught to ambulate on artificial legs and crutches. Freddie, who had good control of his abdominal muscles, could probably learn to do at least as well. As far as arms were concerned, he could probably be fitted with bilateral cineplastic prostheses attached to the muscles in the chest wall. Freddie's case, we explained, was difficult but there was no reason to despair.

Her third question was hardest of all. We

explained that the odds were against her: her chances were one in eight that she would have another deformed child, as opposed to one in 200 for the general population. Just then another mother in the audience asked to be heard.

"I think I can answer that question better than you, doctor," she said. "I was faced with that same problem when my Dorothy was born without a hand. I've since had three more children and they are all perfect, and I say, go ahead and have more children!" Freddie's brother was born two years later, and he is perfect in every way.

Freddie himself has made great progress. He can now balance on his short legs, and is learning to ambulate. Longer legs will be fitted, and, within the next few years, he should be ready for the cineplastic surgery which will provide him with arm prostheses.

Thus it can be seen that the modern concept of rehabilitation replaces the isolated and fragmentary services of the past with a complete, integrated program of restoration designed to help the handicapped individual become a productive and useful member of society.

53 Lincoln Park

THE CONTRACT EVIL*

The communications of Doctors Hutchinson and Wilson printed in our correspondence column last month tell their own story and tell it well.

The letter of the former, dealing with an insidious and growing evil with some minuteness and calling for information as to the spread of the contract system in other counties than his own, we especially commend to the attention of our readers. Perhaps some one, who has given attention to the question, can answer Dr. Hutchinson's request for facts and figures.

To the thoughtful mind it must be apparent that the lot of the general practitioner constantly grows harder. As has been wittily said, the specialist has left him nothing to treat except the umbilicus. The dispensaries and clinics are doing everything possible to instill into the minds of the laity the conviction that it is entirely needless to pay a doctor, whose chief delight it is to give away his services and allow his family to starve. But—and this is the unkindest cut of all—doctors by underbidding each other and taking lodge and society contracts are actively engaged in pulling down their financial house about their ears.

Brethren, this must be stopped! The remedy is in our hands and can best be applied according to the plan outlined in Dr. Hutchinson's letter, namely, through the county societies. But to make it effectual every legally qualified practitioner of medicine should be brought into his county society and must then pledge himself to do no work for lodges or societies for less than the regular professional fees. And the society must see to it that he keeps his pledge. And they must also see to it that no one not legally qualified can practice medicine in any county in this state.

This may sound Utopian. But we are convinced that it is not only feasible but will eventually come to pass. Self interest alone will before many years force every legally qualified practitioner to join his county society, and the county societies, on the other hand, will be forced to break up the contract evil, discipline their own refractory members and drive out the quacks or go out of existence.

Physicians must organize more thoroughly to protect themselves, and if the present state and county societies cannot protect their members their doom is sealed, for they will soon be replaced by organizations that will do this and do it effectually.

* Editorial. J. M. Soc. New Jersey 1:222, March, 1905.

FIFTY YEARS OF UROLOGY: A REVIEW

C. R. O'Crowley, M.D., Newark, N. J.

The dawn of urology in this country actually began 75 to 80 years ago. Since then it has numbered among its students men of individual brilliancy and originality who paved the way for a systematic development of urology as a well-defined specialty which for a long time had been absorbed in the older subjects of general surgery and medicine. Even what individuality it may have possessed was not always of a desirable sort. It was often made to bear the obloquy of associations which were far from respectable. Certain so-called "specialists" attached to its ranks were habitually dubbed by names more forcible than elegant. It is on that account, as well as for their pre-eminent scientific ability, that a great meed is due the fathers of urology of days gone by. They were not abashed by these uninviting conditions and, pioneer-like, they fought their way through the untrodden and often discredited paths of urology. Although their deductions may not always have been logical nor their teachings correct, they blazed a trail to the lasting advantage of those who followed.

They had no such conditions for encouragement and assistance as we have now. They had no such equipment which is within our reach at present; and no such clean-cut technic for its use. All these were formulated and served to us by our generous predecessors. Diagnosis and therapy of urinary affections were not then reduced to the satisfactory degree of precision now prevailing. Yet they investigated, practiced, and enunciated precepts that evoke our admiration of their wisdom and intelligence.

Those who blazed the trail, to mention a few, were Otis, Bigelow, Guiteras, Bransford Lewis, Granville MacGown, Hugh Cabot, Louis Schmidt, Hugh Young, Herman Kretschmer, Ferd Valentine, Keyes (senior and junior), Wishard, Bentley Squier, and Braasch.

THE CYSTOSCOPE

If we admire the accomplishments of these and many others that might be mentioned, how shall we adequately express the esteem in which the father of modern cystoscopy, Max Nitze, is held? He did more than any other to pave the way to precision in urologic diagnosis and therapy as it exists today. Use of the cystoscope has transformed the study of urinary diseases from an inexact, intangible, shifting basis to one of definite and established proportions. Together with ureteral catheterization, the cystoscope has been the means of bringing within diagnostic reach all of the upper urinary tract—the bladder, ureters and kidneys. A new world of diseases and disorders is now placed before us—conditions that have hitherto been inaccessible and remote, or even unrecognizable. Nitze introduced direct inspection of the bladder as a practical procedure; his hand guided the growth of the cystoscope from its infancy to its maturity; from the cumbersome and dimly-lighted mechanism of the early days to the effective instrument of the twentieth century. Fortunately he lived to see the fruition of his hopes, the world-wide recognition of his instrument as a blessing to humanity, and its use in all civilized countries.

It is within the memory of a great many of us to recall the earliest days of the struggles waged in behalf of urology. Thirty-five to fifty years ago the urologist was spoken of as a venereologist. At that time the support of our brother practitioners was withheld and our institutional standing was insecure and unstable. Membership on the staffs of hospitals was either refused entirely or if accorded, we were tolerated because of some benign influence. Once admitted to the hospital staff we were accepted as representing a new medical fad originated to digest another portion of the dissected skeleton of general medicine.

ADVANCES IN UROLOGY

In spite of such early rebuffs, the strides made in urology in the past fifty years have been many and should be enumerated briefly. From the surgical point of view the urologist

of today is a well-rounded surgeon, trained to do the most extensive type of radical surgery. This has been particularly true in the management of genito-urinary malignancies. Whereas formerly conservatism was the rule, today early carcinomatous lesions are approached with wide excision in mind. For example, complete cystectomies and pelvic exenterations are done along with ureteral transplants to re-establish the flow of urine. Parts of the intestinal tract have been used to replace the bladder as a receptacle for urine. Jewett and Marshall's new classification of bladder tumors has greatly improved our understanding of this type of malignancy. Tumors of the testes are now treated not only by local excision but with radical lymph node dissection including, in some cases, dissection of the periaortic nodes.

The influence of antibiotics and improved surgical technics can best be appreciated by considering surgery of the prostate. The morbidity and mortality in this procedure have been reduced to almost zero. There is now no age barrier to prostatic resection. Suprapubic prostatectomies can now be done in one stage instead of the two stages formerly used. Transureteral resections have become commonplace, as have perirenal and retropubic prostatectomies, largely due to the work of Hugh Young and Millan.

The contributions of Huggins and Thorn in the treatment of prostatic carcinoma have done much to relieve this distressing ailment of old age. The combined surgical and endocrine approach—with bilateral adrenalectomy recently added—are major advances in this field.

The array of diagnostic instruments now available to the urologist would stir the imagination of yesterday's urologists. We now have available stone crushers and stone visualizers; the old Bigelow instrument has been replaced by later models of modern design. On the radiologic side, lumbar aortography and perirenal air insufflation have sharpened the urologist's diagnostic acumen.

The problem of urinary calculi remains a challenge. However, recent investigations of the physical and biochemical pathophysiology of this disease by Butts and others have been major contributions in the solution of this puzzling phenomenon. Studies on calcium metabolism in the past fifty years have also thrown light on the pathogenesis of renal calculi.

Other urologic problems that have been under renewed attack within recent years have been renal tuberculosis, which is succumbing to combined antibiotic and surgical attack, and problems of sterility. Today the female is no longer held solely responsible for infertility. The urologist plays an important role in investigating the husband's contribution to this distressing state. Plastic repair of the male genital organs has helped some cases of male sterility where the continuity of the epididymis and vas deferens has been lost.

If this is our heritage, and if those who have recently entered, or are about to enter, this specialty, are to reap the benefits of the work of our pioneers, how can we best visualize the future of urology so as to maintain the high standard we have reached and further strive to elevate that standard for the future?

From a lowly beginning the early workers in this specialty with steady advancement along strictly scientific lines progressed in their study of the entire genito-urinary tract. From the lowest depths of the fossa navicularis up to the heights of the suprarenal bodies, no portion was left uninvestigated. Such tireless efforts were sure to reap a just reward so that we see them advancing from so-called venereal specialists to diagnosticians, from diagnosticians to surgical collaborators and thence to the established urologic surgeons of today.

With the same enthusiasm that marked the new era in prostatic surgery, each problem of urologic study was attacked by laboratory worker, scientist, clinician and surgeon, until our present knowledge of the genito-urinary tract has been achieved.

In this state, those who have contributed numerous articles and written books on the subject of urology, are Stanley Woodruff, Meredith Campbell, Charles deT. Shivers, Martland (pathologist) and C. R. O'Crowley.

Urology in this country really crystallized when the Association of Genito-Urinary Surgeons, following the French and German patterns, was organized sixty-four years ago with a limited membership of 75 that comprised most

of the men holding teaching positions in our universities. Four years later the American Urological Association was formed and now has a membership of about 1500. These are the forums before which scientific papers are read and discussed and which helped materially in rapidly advancing the field of urology. So much so, that there are well over a thousand urologists in this country who have been certified by the American Board of Urology.

31 Lincoln Park

A PLEA FOR A MORE CAREFUL EXAMINATION IN RECTAL CASES*

A. HAINES LIPPINCOTT, M.D., Camden, N. J.

So much has been said under this heading that it hardly seems fair to the subject to present it to you in so brief a paper as this must necessarily be.

I only hope the paper will stimulate a free discussion and that some points of value will be brought out that will be of future service to some of us and consequent comfort to some sufferer who may consult us.

There are two groups of diseases in the domain of medicine and I believe to be the richest field for the quack and charlatan; namely, genito-urinary and ano-rectal diseases. I believe it is the fault of the physicians themselves that this is so. Whether this is on account of the anatomical location of these diseases, and the natural repugnance one has to making a thorough examination, I know not. But I do know that there seems to be a lack of knowledge of these diseases on the part of a great many physicians. The examinations are made, if made at all, in a careless slipshod manner, and in a great many cases the patient makes the diagnosis himself and the physician is satisfied with prescribing some ointment for what the patient thinks is piles, but may be a fissure, or some astringent injection for a urethral discharge, when a stricture of the uretha may be the fault. Without a knowledge of the cause of our patient's symptoms we cannot expect to relieve him and because we do not relieve him he is driven to the advertising specialist, who *docs* makes the necessary examination. And consequently relieves the patient and pockets the fee, that rightly belongs to us.

The different diseases of the anus and rectum present so many symptoms alike that a careful examination of the parts is absolutely necessary to make the diagnosis. Pain, hemorrhage, tenesmus, itching, and moisture may mean either hemorrhoids, internal or external fissure, fistula, pruritis, eczema or cancer. Surely the treatment in all the cases is not the same. You will pardon me if I repeat, it is a duty you owe to your patient to make a careful examination, or refer him to one of our own brotherhood who will, in order that he may receive the advice and relief he is willing to pay for. By doing so you will help strip the charlatan, of some of his fees and prestige.

On account of the natural fear of ether and an operation a great number of rectal cases, especially of the male sex, will not even consult their family physician, fearing that an operation may be advised. They are easy victims to the lure of the man that advertises, no ether, no knife, no loss of time and positive cure. No doubt in most cases a quicker and better result can be obtained under ether, but they care not for that, they will not take ether, they will not be operated on, and they will not give up their time. In these cases I feel that, for our own protection, we are justified in advising less radical methods.

* J. M. Soc. New Jersey 1:309, June, 1905.

A HISTORY OF THE WOMAN'S AUXILIARY TO THE MEDICAL SOCIETY OF NEW JERSEY

Mrs. William E. Dodd,* Beach Haven, N. J.

At the 160th annual meeting of The Medical Society of New Jersey held in Atlantic City, June 17-19, 1926, the House of Delegates, after hearing an address by Mrs. W. Wayne Babcock of Philadelphia, organization chairman of the Woman's Auxiliary to the American Medical Association, unanimously voted to organize a Woman's Auxiliary.

To facilitate the preliminary organization temporary officers were appointed by Dr. James S. Green, then President of The Medical Society of New Jersey, and Mrs. Samuel Barbash of Atlantic City was appointed chairman of a committee to organize an auxiliary in each of the twenty-one counties in the state.

The objects for organization were to promote good fellowship among physicians' families and to assist the Medical Society in its program of health education and public welfare.

Much was accomplished in the ensuing year. Auxiliaries were formed in fourteen counties and five other counties were in the process of organization. When the Medical Society convened in Atlantic City on June 9, 1927, the foundation of the auxiliary had been laid. The temporary officers became the first duly elected officers and were:

President	Mrs. A. Haines Lippincott	Camden County
President-Elect	Mrs. George L. Orton	Union County
First Vice-President	Mrs. Walter P. Conaway	Atlantic County
Second Vice-President	Mrs. Ephraim L. Mulford	Burlington County
Third Vice-President	Mrs. Frank Devlin	Essex County
Recording Secretary	Mrs. A. Longstreet Stillwell	Somerset County
Treasurer	Mrs. James Hunter, Jr.	Gloucester County

The first constitution and by-laws were adopted June 10, 1927.

Very soon after the county auxiliaries were organized they discovered that merely meeting socially did not create sufficient stimulus to hold them together and that there were activities in which they could participate. Thus the philanthropic function developed. Community needs were found and the members undertook to serve in those which were usually related to the work of the medical profession.

The questions, "What can we do?" and "Why are we organized?" were answered in a very short time. The report given at the annual convention of the Auxiliary to the American Medical Association in June 1929, told of placing *Hygeia (Today's Health)* in public schools and clubs; of vigorous support to the periodic health examination and antidiphtheria campaigns; of group meetings to make surgical dressings and hospital supplies and of assisting the State Medical Society in a legislative program to prevent the passage of a bill which would have permitted chiropractors and osteopaths to perform surgical operations.

To further acquaint the counties with the work of the Auxiliary the *Blue Primer* was published and circularized. It served as a guide for the county auxiliaries with suggestions concerning work that could be undertaken. The parent body early became aware that some counties were advancing more rapidly in public projects than others. But it aimed at suggesting rather than dictating specific objects. Programs were not applicable in all counties because of size and local problems. An early project for all counties was the drive for membership in the Society for Relief of Widows and Orphans. Speaker bureaus for lay education in health matters were established in all counties.

* President of the Woman's Auxiliary to The Medical Society of New Jersey, 1945-46.

Meanwhile, membership in the auxiliary increased as did its accomplishments. At each subsequent annual meeting the county auxiliaries reported widely varied services to the public. Services were only undertaken with the approval, or, at the suggestion of the Medical Society. As the years pass a closer bond between the Auxiliary and the Medical Society has developed. The Auxiliary has justified its organization in its efforts as liaison to the public in the fight against socialized medicine; in its work during the war in all phases of health and defense programs; in its continuous efforts in the home safety programs; and in the following projects: school health councils, local health units, student nurse recruitment, nurse scholarship funds, chronically ill, the handicapped, heart disease, cancer, mental hygiene, rural health, blood banks and juvenile delinquency.

Although there were many obstacles during the war years, the Auxiliary progressed in all its programs. Several counties dispensed with meetings because of small attendance and transportation difficulties. However, today all but two of the twenty-one counties are organized and take an active part in matters affecting the health and welfare of the people of our state. Our auxiliaries and our members are well recognized for the quality of their health programs and for the character of their community contributions.

The publication of our official *News Notes* has broadened the understanding of our objectives and accomplishments, for its mailing list includes not only the auxiliary members but also all physicians' wives in the state.

In The Medical Society of New Jersey all past presidents are honored by the title of Fellow. In the Auxiliary the past presidents are known as Fellowettes. Although the Fellowettes were organized in June 1941, as a social group, they consider and offer suggestions on problems presented to them at their annual meeting during the state convention. They purchase the president's pin which is worn by the president during her term of office. They conduct the memorial service and have provided the silver vase and candlesticks which are used in the service. The fellowettes are:

*1927-1928	Mrs. A. Haines Lippincott, Camden
*1928-1929	Mrs. George L. Orton, Rahway
*1929-1930	Mrs. James Hunter, Westfield
1930-1931	Mrs. John Nevin, Jersey City
1931-1932	Mrs. LeRoy Van Ness, Newark
*1932-1933	Mrs. Charles F. Adams, Trenton
1933-1934	Mrs. Harry V. Hubbard, Plainfield
1934-1935	Mrs. Arthur J. Casselman, Camden
*1935-1936	Mrs. Frederick A. Kinch, Westfield
1936-1937	Mrs. George A. Rogers, New Hope, Pa.
1937-1938	Mrs. Samuel Salasin, Atlantic City
1938-1939	Mrs. Don A. Epler, East Orange
1939-1940	Mrs. Gerald E. McDonnel, Mount Holly
1940-1941	Mrs. Richard J. McDonald, Paterson
1941-1942	Mrs. Oswald R. Carlander, Audubon
1942-1943	Mrs. J. Howard Hornberger, Roebling
1943-1944	Mrs. Asher Yaguda, Newark
1944-1945	Mrs. David B. Allman, Atlantic City
1945-1946	Mrs. William E. Dodd, Beach Haven
1946-1947	Mrs. Frederick G. Wandall, Clayton
1947-1948	Mrs. Lodovico Mancusi-Ungaro, New'k
1948-1949	Mrs. Robert B. Walker, Highland Park
**1949-1950	Mrs. Norman Nathanson, Long Branch
1950-1951	Mrs. R. John Cottone, Trenton
1951-1952	Mrs. Thomas H. McGlade, W. Coll'gsw'd
1952-1953	Mrs. Edward H. Dyer, Atlantic City

* Deceased
** Resigned

To evaluate the accomplishments of the Auxiliary during each presidency would be impossible. The original plan was continued and with changing times additional projects were inaugurated so that today we are recognized as a force in both state and national affairs. Signal honor was ours when Mrs. David B. Allman, our eighteenth president, was elected president of the Auxiliary to the American Medical Association in 1948.

This account would be incomplete if we were to omit mention of the assistance The Medical Society of New Jersey has rendered us. Through their generosity and understanding there is an auxiliary office in the headquarters building in Trenton. They have advised us in our planning and have assisted in making possible the public relations programs which have emphasized the interest of the medical profession in the health and welfare of New Jersey's citizens.

The Auxiliary has been commended for its entertainment and assistance during the annual conventions of the American Medical Association in Atlantic City. This too is made possible through the generosity of The Medical Society of New Jersey.

Today we have 2013 members, and are ready at all times to aid in promoting the aims and objects of The Medical Society of New Jersey.

Ocean Street and Bay Avenue

ROBERT McKEAN, FIRST PRESIDENT OF THE MEDICAL SOCIETY OF NEW JERSEY

Fred B. Rogers, M.D., Trenton, N. J.

In the Rev. Dr. Robert McKean, medical missionary and first president of The Medical Society of New Jersey, we find an outstanding example of the pastor-physician, a professional combination often seen in olden times. From its beginning the medical profession was ancillary to the clerical and for hundreds of years the physician was also the priest. Medical history includes the achievements of clergymen such as Stephen Hales, Gilbert White, Joseph Priestley and Gregor Mendel—divines with a penchant for science. At the present time an eminent physician theologian is Dr. Albert Schweitzer, who combines faith and healing at his mission hospital in Africa.

Sir William Osler, writing about Thomas Linacre, the physician-priest who founded the Royal College of Physicians of London in the year 1518, emphasized the kinship of these two highest callings at that early date:

> From the days of St. Luke there have been many instances of what has been called the angelical conjunction of physic and divinity . . . At that period, indeed for many years later, there was a very close affiliation between the medical and the clerical profession. It was not an uncommon thing for a learned divine to practice physic, and on the other hand a considerable number of distinguished physicians . . . became priests.

The first state medical society in the American colonies, that founded in New Jersey in 1766, presents a close parallel to its earlier counterpart in England by owing its establishment to another pastor-physician. This versatile man, Robert McKean, successfully practiced during his lifetime three professions — medicine, theology and pedagogy—in colonial New Jersey.

The practice of medicine in colonial times had more breadth than depth, and the clergy, who were among the best educated members of the community, often had to care for both the bodies and souls of their parishioners. In the eighteenth century, an era rife with epidemic disease, the local parson frequently was called upon to minister and prescribe for his charges who were sick. In addition, the physicians-proper of that time often wore Geneva bands from their collars as an appropriate symbol of the clerical origin of the medical profession. The link between medicine and divinity is apparent from the fact that six clergymen, including the first president, were numbered among the thirty-six members of The Medical Society of New Jersey during its first decade. (In addition to Dr. McKean, the following pastor-physicians were included in this group: Drs. Isaac Brown, rector of Trinity Church, Newark, and his son Samuel, also a cleric; Samuel Kennedy—Scottish minister at Basking Ridge; Nathaniel Manning—physician at Metuchen and later Anglican missionary to Virginia; and Jonathan Odell, rector of St. Mary's Church in Burlington.)

Information regarding the personal and professional life of Dr. McKean is not readily available today, as his activities have been somewhat obscured by the passing of two centuries. From the facts available and from auxiliary sources, however, we can reconstruct something of the man and his world. Robert McKean was born (1732) in Chester County, Pennsylvania, where his parents, William and Letitia McKean, Scotch-Irish immigrants, kept a tavern. At the age of eleven the boy was placed under the instruction of Rev. Dr. Francis Allison, a Scottish divine at New London, Pennsylvania. Robert studied both medicine and theology; to further his education he subsequently went to England where he was ordained in the priesthood of the Anglican Church. Soon thereafter he was appointed as missionary by the Society for the Propagation of the Gospel in Foreign Parts to Christ Church in New Brunswick, New Jersey. He arrived there on December 16, 1757. ("The

The author wishes to acknowledge the kind assistance of the Rev. George H. Boyd, D.D., Rector of St. Peter's Episcopal Church, Perth Amboy, N. J.

Society for the Propagation of the Gospel in Foreign Parts" was incorporated in 1701 as the earliest foreign missionary organization of the Church of England. From the time of its incorporation to that of American independence, this society founded nineteen churches in New Jersey alone. Known more familiarly as the "Venerable Society," this august body still carries on its missionary work throughout the British Empire.)

During his six years as missionary to New Brunswick (1757-1763), Dr. McKean also frequently officiated at the nearby churches of Piscataway and Spotswood. Through his efforts a charter was secured for the New Brunswick parish and a church built at Spotswood. Like many of his fellow missionaries he also practiced medicine in connection with his parochial duties. (There was a scarcity of trained physicians in the colonies and healing was another means of winning people to the church.) In recognition of his achievements, the College of Philadelphia (now the University of Pennsylvania) conferred the honorary degree of master of arts upon him in 1760—three years after his return from England.

From letters to the Venerable Society, reporting his activities, one can reconstruct, in part, McKean's life at New Brunswick and later in Perth Amboy. In one such communication (April 15, 1761) he added a quaint personal note announcing his marriage to Mabel Graham Antill, the daughter of a prominent colonial councilor, Edward Antill, II, of New Brunswick and Piscataway (he was also a lay reader at Dr. McKean's churches in those places): "One circumstance respecting myself, though perhaps foreign to the nature of this letter I can not resist an inclination I have of telling you. I have, Sir, changed my condition in life, being happily married about two months ago to the daughter of one of my parishioners." A contrasting contemporary comment on this marriage described the bride as "a young lady of very gay and independent spirit, not calculated to enhance the domestic happiness of the reverend missionary." This union produced no children—so far as can be ascertained—and McKean's widow remarried several years after her husband's death in 1767.

We note Dr. McKean's prominence as a citizen of the colony by finding his name included as one of three Anglican clergymen appointed to greet Governor Thomas Boone on his arrival at New Jersey in July, 1760. Again, in the following year, McKean appears as a member of the clerical delegation designated to welcome the succeeding royal governor, Josiah Hardy.

In 1763, at the request of the vestry of the Episcopal congregation at Perth Amboy, McKean was appointed missionary to St. Peter's Church in that city. In the same year the wife of the last colonial governor of New Jersey, William Franklin (son of Benjamin Franklin), presented a surplice to that church for use by its minister. (St. Peter's Church was then the governor's parish as Perth Amboy was the capital of the province of East Jersey. With Burlington in West Jersey it shared prestige as capital of the colony in alternate years. Arbitrarily divided at first, East and West Jersey were subsequently united.)

The rectorate of Dr. McKean at Perth Amboy occurred during the flourishing period often termed the "Golden Age" of that city. During his four years there (1763-1767), Dr. McKean successfully combined the practice of medicine, theology and pedagogy. In this day of specialism such a diversity of interests may appear somewhat astounding. As a doctor of medicine he practiced in many parts of Middlesex county, and in 1766 became a founder and first president of The Medical Society of New Jersey. Reelected to its presidency the following year, he held that office until his untimely death at the age of thirty-five.

Had he lived longer, we may safely infer that Dr. McKean would have become one of the great leaders of the Church in the American colonies. The significance of his ministry at Perth Amboy is reflected in a letter which he wrote on April 27, 1767: "For more than a year past no kind of public worship has been maintained in Amboy except that of the Church of England in consequence of which several persons of other denominations regularly attend our service." During his rectorate St. Peter's Church was enlarged, a spire added

to its steeple and its graveyard improved. As with each of the parishes supported by the Venerable Society a library was maintained at Perth Amboy by a grant from the allied "Society for the promotion of Christian Knowledge." This library undoubtedly contained medical books used by the rector in his ministry of healing. While at St. Peter's McKean devoted his services almost exclusively to that church at the request of its vestry. In 1764, however, Trinity Church at Woodbridge also came under his pastoral care.

Dr. McKean was among the group of far-seeing Anglican clergy who early proposed securing a bishop for the church in America. To this end fourteen ministers met in convention at Perth Amboy in September, 1764. Under the leadership of Dr. William Smith, provost of the College of Philadelphia, the convention drafted letters to the Bishop of London requesting the English authorities to establish an episcopate in the colonies. During the subsequent three years similar conventions met to further this request. At a meeting convened in May, 1767, McKean and Dr. Myles Cooper, president of King's College (now Columbia University), were appointed to interview the Governor of Maryland to enlist his support for the Episcopate in America. (Also active at these meetings was Dr. Samuel Seabury, another pastor-physician, who had preceded McKean as missionary to New Brunswick and later (1783) was elected the first Bishop of the Episcopal Church in America.)

Pastor and physician at New Brunswick, Dr. McKean, after his arrival in Perth Amboy, also undertook the task of schoolmaster in that town. The existence of a school in conjunction with St. Peter's Church was noted in the minutes of its vestry for July, 1765. At that time the rector had requested that a school building be erected to replace the Barracks (one of five such military quarters constructed in New Jersey during the French and Indian War—the one at Trenton alone remaining today), as this structure was no longer available for teaching. A schoolhouse adjacent to the church was promptly built; this subsequently was noted to be temporarily vacant on the death of its master two years later.

In a letter to the Secretary of the Venerable Society dated April 17, 1767, McKean first reported the sickness (consumption) which was to destroy him. He wrote that, about the 25th of October, 1765:

> I was seized with a very tedious and dangerous sickness that rendered me entirely incapable of any business for about three months. During that time, however, I have my Church in this place very happily and satisfactorily supplied by the kind labors of the Rev. Mr. Bennett, Chaplain of the 28th Regiment, half of which is quartered here and partly by the assistance of my Brethren who favored me with their friendly and brotherly visits, and did everything in their power to serve me in my affliction.

Writing to the Society on October 12, 1767, Rev. Dr. Thomas Chandler of St. John's Church, Elizabeth, noted: "Wasted away with a tedious disorder, the worthy, the eminently useful and amiable Dr. McKean is judged by his physicians to be at present at the point of death. A better man was never in the Society's service." Five days later he died at Ross Hall, the home of his father-in-law at Raritan Landing, near New Brunswick.

Dr. McKean was buried in the churchyard of his parish at Perth Amboy. His grave, located on the northeast corner of the chancel, is covered with a flat stone erected by his brother. (Thomas McKean, 1734-1817, became an outstanding figure in the early history of the United States. A signer of the Declaration of Independence from Delaware, member and president of Congress, he later was Chief Justice and three times governor of Pennsylvania.) Today one can clearly decipher the epitaph of the first president of The Medical Society of New Jersey in St. Peter's churchyard. His monument lies close to an ancient stone in the chancel wall which is dated 1685—the year of the first service in this, the oldest parish of New Jersey.

The letters N. S. after the birth date refer to the "New Style" of reckoning time instituted in the year 1752. Prior to that date, the legal year began with the twenty-fifth day of March—The Feast of the Annunciation. After that, by legal enactment in England, it was made to begin with the first day of January.

Dr. McKean's role in the establishment and

In Memory of
The Rev. Robert McKean, M.A.
Practitioner in Physic, &c.
And Missionary from the Society
For the Propagation of the Gospel
In foreign Parts
To the City of Perth Amboy,
Who was born
July 13th, 1732, N. S.
And died October 17th, 1767.
An unshaken Friend,
An agreeable Companion
A rational Divine
A skilful Physician.
And in every Relation of Life
A truly Benevolent and
Honest Man,
Fraternal Love hath erected
This monument.

early activities of The Medical Society of New Jersey is recorded in the *Transactions* kept by its original members. In response to advertisement in the public press, seventeen physicians met at Mr. Duff's Tavern, in New Brunswick, on July 23, 1766, to found this body "for their mutual improvement, the advancement of the profession and promotion of the public good." The actual instigators of this movement are not now known but it is almost certain that Robert McKean was among them for he was elected president of the Society at its organization meeting. In this position he was the first to sign the "Instruments of Association and Constitutions" then adopted. (This document outlined the aims and regulations of the new association.) In addition, McKean alone signed the "Table of Fees and Rates" approved by the group for medical and surgical charges. To facilitate more frequent meetings the Society was subdivided into four districts or "inferior" societies, to meet respectively at Elizabeth, Bound Brook, Princeton and Morristown. The president and five other doctors were designated to comprise the Elizabeth meeting scheduled for the following September.

At the second general meeting, convened in Elizabeth on November 4, 1766, the minutes state that "the president was prevented by sickness from giving his attendance." Although absent at that time, Dr. McKean was named to a committee appointed to explain the aims of the Society to the public. (This was the germ of a public relations program, so vital for any medical organization.)

A report from the previous Elizabeth district meeting included a "communicated recipe" from Dr. McKean ("who knows nothing of its effects") which was brought up for discussion before the Society. This prescription, strongly recommended by correspondents in Connecticut and Rhode Island, had *powdered glass* as its chief ingredient! Advocated for the treatment of dropsies and hysterics by its endorsers, who "never knew any bad consequences—except when given in too large doses" —its immediate effect was "a very severe pungent pain in the stomach, and an universal shock, something like an electric stroke." The Society, sensible men, "taking the above medicine into consideration, were greatly surprised at the accounts, but judged it not prudent to recommend the use of it, without more authentic proofs of its success." We should not consider this nostrum, however, as typical of the science of that day. Most of the Society's early discussions, although rather quaintly worded, were of more significance.

The third general meeting, held at Perth Amboy on May 5, 1767, was presided over by Dr. McKean. At that time he was re-elected president—a token of the esteem in which he was held by his medical colleagues. One subject taken up at this meeting, which has been of recurrent concern since that time, was that of the requirements for medical study and standards for admission to membership. When the Society was founded, the first medical school in America, now that of the University of Pennsylvania, was in its infancy. The customary entrance to medicine was by apprenticeship to an established practitioner, with few formal standards. It was agreed by the Society that no student be taken as an apprentice unless he had a knowledge of Latin and Greek. Also no member would be permitted to take an apprentice for less than four years, three of which had to be spent with the master and the fourth at a medical school in Europe or America.

Furthermore, all applicants for admission

were required to stand examination on their attainments—a rule that continued in force until later replaced by examination for license to practice in the state. These resolutions, passed at the Society's third meeting, were among the first efforts in this country to establish some standard of medical education. At the fourth meeting, convened at Princeton on November 10, 1767, the Society, now firmly established and growing in influence and membership, unhappily reported "the office of president being vacant by the death of Doctor McKean." The members thereupon proceeded to elect a successor to their first leader. To this day his pioneer services on behalf of The Medical Society of New Jersey have been perpetuated by the one hundred and sixty presidents who have succeeded him to its leadership.

Thirty years ago, at the celebration of the 225th anniversary of the establishment of St. Peter's Church in Perth Amboy, The Medical Society of New Jersey dedicated a tablet in that historic sanctuary in memory of Robert McKean. This tablet, bearing the seal of the Society and the following inscription, may be seen today on the west wall of the church which he served and where his remains now rest.

In Memory of
The Rev. Robert McKean, A.M., M.D.
Founder and First President
of
The Medical Society of New Jersey
Organized in the City of New Brunswick
July 23, 1766
This Tablet is erected
By the Society
1923.

The presentation of this tablet was made by Dr. Wells P. Eagleton of Newark, President of the Society, on Sunday, November 4, 1923. Also present at the ceremony were Governor George S. Silzer of New Jersey, dignitaries of the church and members of the medical profession. In a brief address of dedication Dr. Eagleton, citing his predecessor's achievements, said:

> One can only be said to practice a profession when one has not only learning, but when that learning is applied to the relief and advancement of humanity. Of all the trades and crafts, but three fulfill these requirements—medicine, theology and pedagogy. Today as in the time of McKean, the clergy are striving to improve the spiritual life of man, the educators are trying to develop his mind, and the physicians are trying to relieve his sufferings and to develop his body and through it his spirit... It is not because Dr. McKean was a preacher, or even because he was a physician, that the physicians of today wish to perpetuate his memory; it is because of the standards which he and his associates set for those of us who have followed—it is because of what he did to put a proper spirit in this organization of the physicians of New Jersey.

In both phases of his remarkable career—as physician or pastor—it may well be said of Robert McKean that "a better man was never in the Society's service."

Sir William Osler, discussing the origins of American medicine, offers a succinct conclusion to this study of Dr. McKean and the pioneer organization which he helped to establish:

> What should attract us all is a study of the growth of the American mind in medicine since the starting of the colonies . . . In the . . . generations which have passed, the men who have striven and struggled—men whose lives are best described in the words of St. Paul, in journeyings often, in perils . . . , in weariness and painfulness, in watchings often, in hunger and thirst, and in fastings—these men . . . have made us what we are. With the irrevocable past into which they have gone lies our future, since our condition is the resultant of forces, which, in these generations, have moulded the profession of a new and mighty empire.

Donnelly Memorial Hospitals

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SOME PRINCIPLES OF THE DIAGNOSIS OF INCIPIENT INSANITY*

WILLIAM H. HICKS, A.B., M.D.,
Assistant Physician and Pathologist Essex County Hospital for the Insane, Newark, N. J.

Insanity is viewed by many practitioners too often in a narrow sense. They have the idea that an insane person must have illusions, hallucinations, or delusions; must be profoundly depressed or greatly excited or agitated; must be confused, incoherent and have a disordered memory; must have suicidal, homicidal or destructive impulses. Yet a person may be insane without manifesting any of these symptoms. Let it be remembered that insanity is a disease characterized by the accidental and more or less prolonged disorderd state of the developed self or ego—a sudden and more or less prolonged departure from the individual's standard of thought, feeling and conduct. To arrive at an intelligent appreciation of this definition, I find it impossible for me to escape taxing your patient with a bit of psychological analysis of the empirical self or ego. In this connection I cannot do better than quote, at length, with slight changes from the original text, Prof. James.

In its widest sense, a man's self is the sum total of all that he can call his, not only his body and his psychic powers, but his clothes and his house, his wife and his children, his ancestors and his friends, his reputation and his work, his lands and houses and bank-account. All these things give him the same emotions. If they wax and prosper, he feels triumphant; if they dwindle and die away, he feels cast down.

That organized psychic cosmos constituting the individual ego, the result of the harmonized experience of a lifetime, for convenience of study, may be divided into three parts, according to Prof. James, relating to:

1st.—Its constituents.

2nd.—The feelings and emotions they arouse.

3rd.—The actions to which they prompt—self-seeking and self preservation.

The constituents of the developed self may be separated into four classes:

(a).—The material self.

(b).—The social self.

(c).—The spiritual self.

(d).—The pure ego.

The body is the innermost part of the material self. The clothes come next; and most people, if asked to choose between having a beautiful body clad in raiment perpetually shabby and unclean, and having an ugly and blemished form always spotlessly attired would prefer the latter state. Next our immediate family is a part of our selves, our father and mother, our wife and babes. When they die a part of our very selves is gone. Their wrong is our shame. An insult to them arouses our anger.

* J. M. Soc. New Jersey 1:234, April, 1905.

ANNOUNCEMENTS

PHYSICALLY HANDICAPPED WORKSHOP

The Advisory Committee on Rehabilitation of The Medical Society of New Jersey will sponsor a workshop on employment of the physically handicapped at the Kessler Institute for Rehabilitation, West Orange, on Friday, October 2. Speakers representing labor, management, insurance, and medicine will discuss various phases of this problem. Rehabilitation of cardiac, tuberculous and geriatric patients will also be presented. Physicians and other interested persons are invited to attend.

PAN AMERICAN MEDICAL WOMEN'S ALLIANCE MEETING

The Pan American Medical Women's Alliance announces that it will hold its fourth annual Congress at the Beeekman Towers Hotel, First Avenue and 49th Street. New York City, September 24 to October 1. The program will consist of scientific presentations, round table luncheon discussions, and tours of New York City's medical centers, as well as social activities. Further information may be obtained from the Registration Chairman, Ina A. Marsh, M.D., 140 Linwood Ave., Buffalo 9, N. Y.

DIABETES SYMPOSIUM

The New York Diabetes Association will hold its "First Symposium Day on Diabetes" on Thursday, October 8, at the Memorial Center for Cancer and Allied Diseases. The program will consist of summaries and reviews of current research in the field of diabetes and general metabolism with special reference to their practical aspects. The meeting is open to all interested physicians. Advance registration (no charge) may be made by applying directly to the New York Diabetes Association, 2 East 103 Street, New York City.

AMERICAN GOITER ASSOCIATION AWARD

The American Goiter Association announces competition for the Van Meter prize ($300) for the best article concerning research on problems of the thyroid gland. Papers may cover either clinical or research investigation, are limited to 3000 words in English, and should be submitted to the Corresponding Secretary, Dr. John C. McClintock, 145½ Washington Ave., Albany 10, N. Y., not later than January 15, 1954.

BOOKS FOR ISRAEL

Medical, scientific and technical books are needed in Israel. Physicians who are willing to donate books to this cause are requested to send them to Books for Israel, 115 King St., New York 1, N. Y. Such books may be sent by parcel post at special book rates. The cost of transporting them to Israel need not be borne by the donating physician.

CARDIAC SURGERY AWARD

The Rhode Island Medical Society announces that the subject of this year's medical essay competition will be "Recent Advances in Cardiac Surgery." The papers submitted should be limited to 10,000 words. A prize of $250 is offered. Further information may be obtained from the Rhode Island Medical Society, 106 Francis St., Providence 3, R. I.

REHABILITATION MEETING

The New Jersey Society of Physical Medicine and Rehabilitation announces a combined meeting with the Pennsylvania Academy of Physical Medicine and Rehabilitation to be held at the Sacred Heart Hospital, Allentown, Pa., on Saturday, October 17. The program will start at 1:30 p.m. with a tour of the hospital's physical medicine department and will be followed by seminars and lectures on various phases of rehabilitation.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Modern Treatment: A Guide for General Practice. Ed. by Austin Smith, M.D. and Paul L. Wermer, M.D. with fifty-three contributors. New York, Paul B. Hoeber, Inc., 1953. Pp. 1146. ($20.00)

The editor of the Journal of the American Medical Association and the secretary of the A.M.A.'s Committee on Research have enlisted the aid of 53 contributors in preparing this book, subtitled "A Guide for General Practice." Credit must be given to the editors for excellent arrangement of a mass of clinical material and to the publishers for its presentation, which is beautifully done. In 51 chapters and an appendix virtually all that can be said of modern therapy has been concisely summarized.

Mechanically, the book is a joy for the reader. Each chapter is well organized, with brief paragraphs on classification, diagnosis, clinical course, as well as more detailed consideration of specific and supportive therapy. Headings, each in distinctive type, are clear, and as a whole the book is easy to read. The omission of bibliographic data precludes its use as a guide to additional reading.

The difficulty confronting the reviewer of this volume is to evaluate its place in modern medical practice. In spite of over 1100 pages, it attempts to include so many topics that, of necessity, each is covered rather sketchily. For instance, the entire chapter on pulmonary diseases takes 23 pages, cirrhosis of the liver is alloted 3 pages, rheumatic fever 3, etc. Although each item is covered admirably, and suggested therapy is up-to-date, such brevity leads to a rather dogmatic approach. Certainly, no physician reading any particular section could feel qualified as an expert in that particular subject. This reviewer believes the modern practice of medicine to be so complex that more than a nodding acquaintance with therapeutic principles is required. Sooner or later every doctor finds, either because of training or experience, that he becomes more proficient in certain fields, and he will necessarily limit himself in scope. No matter how general his practice, some problems will be beyond his capabilities, and will have to be referred to a colleague. Therefore, a book of this type has a limited appeal. It will be best used by medical students and interns desiring a bird's eye view of all therapeutics, candidates for specialty exams desiring an outline of treatment principles, and general physicians who want to know what is going on in branches of medicine outside their immediate ken.

Paradoxically, some of the most valuable sections of this book are those which do not pertain to therapy. The opening chapters on the patient-physician relationship, pharmacologic principles of treatment, and principles of clinical immunology are excellent. The first chapter emphasizes correct diagnosis, considers experimental therapy, and the evaluation of new drugs; it closes with a section on medicine and the law that is illuminating. The second chapter relates how new drugs are appraised, discusses factors modifying drug actions, dose-effect relationships, and other topics.

Throughout the book are excellent tables of great value, e.g., the table indicating chemotherapeutic agents for infecting organisms, a diagnostic table of Rickettsial diseases, one concerning treatment of Rickettsial diseases, an outline of parasitic infections, dosage schedules of the cardiac glycosides, and many others. The last few chapters on diagnostic technics, toxicologic problems and poisonings by pesticides are also worthy of note, as is the appendix outling normal clinical laboratory values.

R. D. Goodman, M.D.

Reaction To Injury. Volume II. By Wiley D. Forbus, M.D., Professor of Pathology, Duke University; Pp. 1110. Baltimore, The Williams & Wilkins Co., 1953. ($20.00)

Volume II of "Reaction to Injury" represents the completion of a monumental piece of work by Dr. Forbus. Although begun many years ago and embodying the experience of 20 years in the field of pathology, the work is nevertheless up to date with respect to recent advances in such fields as cytology, physiology, biochemistry, endocrinology, etc.

The approach to the subject of general and special pathology is different from the usual viewpoint. However, the approach differs more in the classification of pathogenesis of disease than it does in the presentation of the classic morphologic changes of disease.

Briefly stated, Dr. Forbus develops the theme that disease states in the ultimate analysis result from the reaction of the biological unit, the cell, to injury of one sort or another. Stated differently, he develops the theme that disease is the result of injury rather than injury being the result of disease. Utilizing this concept, it is pointed out that the individual can react to injury in one of three ways: by (1) resistive reaction; (2) submissive reaction; or (3) adaptive reaction. Volume I covers the nature and causation of disease and the resistive reaction. Volume II completes the theme with a discussion of submissive reaction and adaptive reaction.

Without thought and study, it is somewhat difficult to follow the author's broader concept of disease although a given subject, for example, the deficiency anemias, is thoroughly readable and understandable without reference to the broad framework of Dr. Forbus' thesis. On the other hand,

a little reflection enables one to see the logical development of a basic theme.

The material is well organized. Each subject is exhaustively covered and there is correlation of the clinical phases of disease throughout. The 836 illustrations, of which 54 are in color, are excellently reproduced and reinforce the text on nearly every page.

I would not recommend the book to the casual reader, but for the serious student of pathology—and all medical practitioners should be—it contains a wealth of information presented in clear, concise language.

GEORGE L. ERDMAN, M.D.

The Nervous System: Volume I of the Ciba Collection of Medical Illustrations. Text by Abraham Kaplan, M.D., Gerhardt Von Bonin, M.D., and Albert Kuntz, M.D. Illustrations by Frank H. Netter, M.D. Pp. 143 with 104 colored plates. Commissioned and published by Ciba Pharmaceutical Products, Inc., Summit, N. J. 1953. ($6.00)

Atlases are not new in medical bibliography. This volume, however, has several novel features. It combines, in one book, an atlas of neuro-anatomy, neuro-physiology and neuro-pathology. The illustrations are in the form of beautiful colored plates, some schematic, some almost photographic, drawn by the versatile Frank Netter who is both physician and artist.

The first section, dealing with neuro-anatomy and with the anatomy of the spinal bones and ligaments, is more or less conventional. Except for the vivid coloring, the illustrations do not differ significantly from those available in other good neurologic atlases. The text, however, is written with clarity, and to that extent, this part of the volume is superior to many existing works. A few of the anatomic drawings are unique. The one showing the nerve roots at the base of the brain, and the drawings of the blood supply to the brain are definitely better than the corresponding illustrations in most other atlases of neurology. The section on functional neuro-anatomy is a pioneer and a highly successful attempt to furnish a sort of visual explanation of neuro-physiology. The plates on the autonomic nervous system are certainly the best of their kind ever assembled between covers. The illustrations in neuro-pathology are sketchy and rather elementary; but Dr. Kaplan's text rescues this part of the atlas from mediocrity.

Dr. John Fulton's foreword is an interesting but all too short monograph on the history of neurologic illustrations. An elaborate and indispensable ready-reference index concludes the book.

In the round, it is a handy, practical, and attractive volume that will grace any medical library and usefully serve any clinician who wants to understand a neurologic lesion.

HENRY A. DAVIDSON, M.D.

Current Problems in Psychiatric Diagnosis. Edited by Paul H. Hoch, M.D. and Joseph Zubin, Ph.D. New York 1953, Grune and Stratton. Pp. 291. ($5.50)

The American Psychopathological Association holds, each year, a two-day seminar focussed on a single major topic. This book is made up of papers delivered at the 1951 session, all centering on diagnostic psychiatry. In all, 17 papers, by as many different authors, are printed in full; each group of papers is tied together by a named discussant, whose comments also appear.

The text opens with a scholarly, three-dimensional essay on historical determinants in psychiatric thinking by Edward Stainbrook. Joseph Hughes follows with an eloquent plea for the training of more research psychiatrists. Then, in an interesting *tour de force* by Oskar Diethelm, the validity of the very concept of "psychosis" is neatly denied. He is followed by D. Ewen Cameron who, in a witty and charming essay, develops the concept of diagnosis as a design for action rather than as a filing label. Dr. Hoch finally neatly ties these four papers into a single package.

The validity of current diagnostic methods as reflections of disability is attacked in the next paper by the Hunts. They are followed by Thomas Rennie who impressively demonstrates that psychoneurosis is actually a reaction method rather than a specific disease, and by Clarence Oberndorf who adds numerous whimsical footnotes to the same concept. Hollis Clow presents a prognostic index and reports on its effectiveness in successfully predicting outcome in 73 per cent of a group of psychotics.

Dr. Rockwell devotes a paper to pleading for a better semantic rapprochement between psychiatric nosology and the law. He is followed by Manfred Guttmacher who, in a compact review of the literature of psychopathy, assembles convincing evidence of the meaninglessness of the term and of the role of affect hunger in the production of the adaptive behavior which produces the syndrome. Abram Kardner presents a fascinating anthropologic and cultural analysis of mental disorder. The last five papers, by Wooley, Ackerman, Schick, Lhamon and Jervis cover various aspects of schizophrenia, childhood mental disorders, mental deficiency and psychosomatics. All together the book offers a varied mosaic of sophisticated psychiatric thinking, any part of which will prove thought-provoking to the psychiatrist and interesting reading to any intelligent reader.

A. LEFF, M.D.

Current Therapy, 1953. Latest Approved Methods of Treatment for the Practicing Physician. Editor, Howard F. Conn, M.D. Pp. 835. Phila., W. B. Saunders Co., 1953. ($11.00)

Current Therapy, 1953, gives short, concise data and recommendations for therapy, following the example of its predecessors in previous years. The contributors to this volume represent a national cross section of medical thought. The material given is repetitious of previous volumes; however, the new roster of authors produces a freshness of approach. The text is increased in size. It is produced with technical excellence and close editorial attention. It answers the purpose of a single, simple therapeutic reference guide.

HENRY GREEN, M.D.

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

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TUBERCULOUS INFECTION IN THE LIGHT OF TUBERCULIN MATRICULATION

By Tobias Gedde-Dahl, M.D., The American Journal of Hygiene, September, 1952.

(Ed. Note: The decline in the tuberculosis death rate in some sections of the United States has led to a situation in which virtual eradication in these local areas is now a possibility. In this connection the summary of an extended study of the epidemiology of tuberculosis in a rural population in Norway is presented. The material, of which the article cited is but a part, was published in book form in the Norwegian language.)

Tuberculosis control measures may be based on the assumption that early treatment hinders existing or potential sources of infection from spreading the disease, and shortens the duration of institutional treatment. If most cases of pulmonary tuberculosis develop soon after infection, then the demonstration of the change from a negative to a positive tuberculin reaction provides the earliest diagnosis.

Tuberculin matriculation was the term applied to tuberculin testing of the whole population, which was then divided into a tuberculin-positive and a tuberculin-negative group. The latter was retested with tuberculin at suitable intervals. The positive group and the converters were kept under radiological observation until the risk of disease was minimal and were retested with tuberculin at long intervals.

When, in 1937, the author began to carry out tuberculin matriculation, several questions arose. Was tuberculin matriculation feasible in Norway? What was likely to be discovered with regard to tuberculous infection, disease and transmission? Can tuberculous infection be controlled? Can the further spread of infection, morbidity and mortality be influenced thereby?

The experiment was made in the medical district of Kinn with a population of about 6,500 persons engaged, for the most part, in fishing and farming. In each school district all inhabited houses were mapped and numbered. All households were listed with the name and occupation of each family member and information concerning the tuberculin reaction, tuberculin conversion, illness, contact with tuberculosis and X-ray examinations. Individual health examination cards were filed by families. The cards of persons with notified tuberculous disease and converters were kept in a separate file, the tuberculosis register. The nurses who did most of the work in tuberculin matriculation also had a generalized public health program.

The study proved that it was possible within a limited area to reduce the spread of infection from primary infection tuberculosis, that is, pulmonary tuberculosis developing during the first few years after infection. This is notably the case with tuberculosis in juveniles. However, in a few instances spread of the disease occurred even in the primary phase before diagnosis. In some instances control has been deficient. It has proved impossible to prevent all infections by juvenile sources of infection among newcomers and visitors. Many of these individuals had, presumably, primary infection tuberculosis (hilus cavities in two cases). When tuberculosis control is effected throughout the country it should be possible to protect ourselves against such infections. But spread of the disease continues owing to new outbreaks of old disease, relapses or progressive changes occurring long after the original infection. Progressive disease often follows de-

fective treatment and observation. Spread of infection may also be due to defective cooperation between physicians and the health councils, and lack of continuity in local health activities. Many patients feared relapse and tried to avoid examination.

In most cases the spread of infection could be avoided by more vigorous treatment and more complete follow-up of older patients with tuberculosis. Yet, however accurately we carry out the health examinations, we cannot achieve complete victory over infection until the public has become better informed. It sometimes happens that an infectious form of primary pulmonary tuberculosis runs such a rapid course that others have been infected before the next scheduled examination. A flare-up of an older infection may also occur rapidly. In many instances the ignorance and asocial attitude of the sources of infection have contributed to the spread of infection. There is a difference between infectious and infecting pulmonary tuberculosis. We consider every person with lung infiltrations and bacilli found through smear or gastric lavage, or with only a suspect cavity, to have "infectious tuberculosis." This estimation, however, gives misleading figures of the frequency of infecting tuberculosis.

Even if we realize how dangerous some infection sources may be, we are impressed by the low infectiousness of pulmonary tuberculosis. This may be a question of intimacy of contact or of virulence and viability, that is, the infecting capacity of the tubercle bacilli from different types of pulmonary tuberculosis. These problems are important in the evaluation of our chances to establish efficient epidemiological control of tuberculosis, which are probably much greater than was formerly believed in Norway.

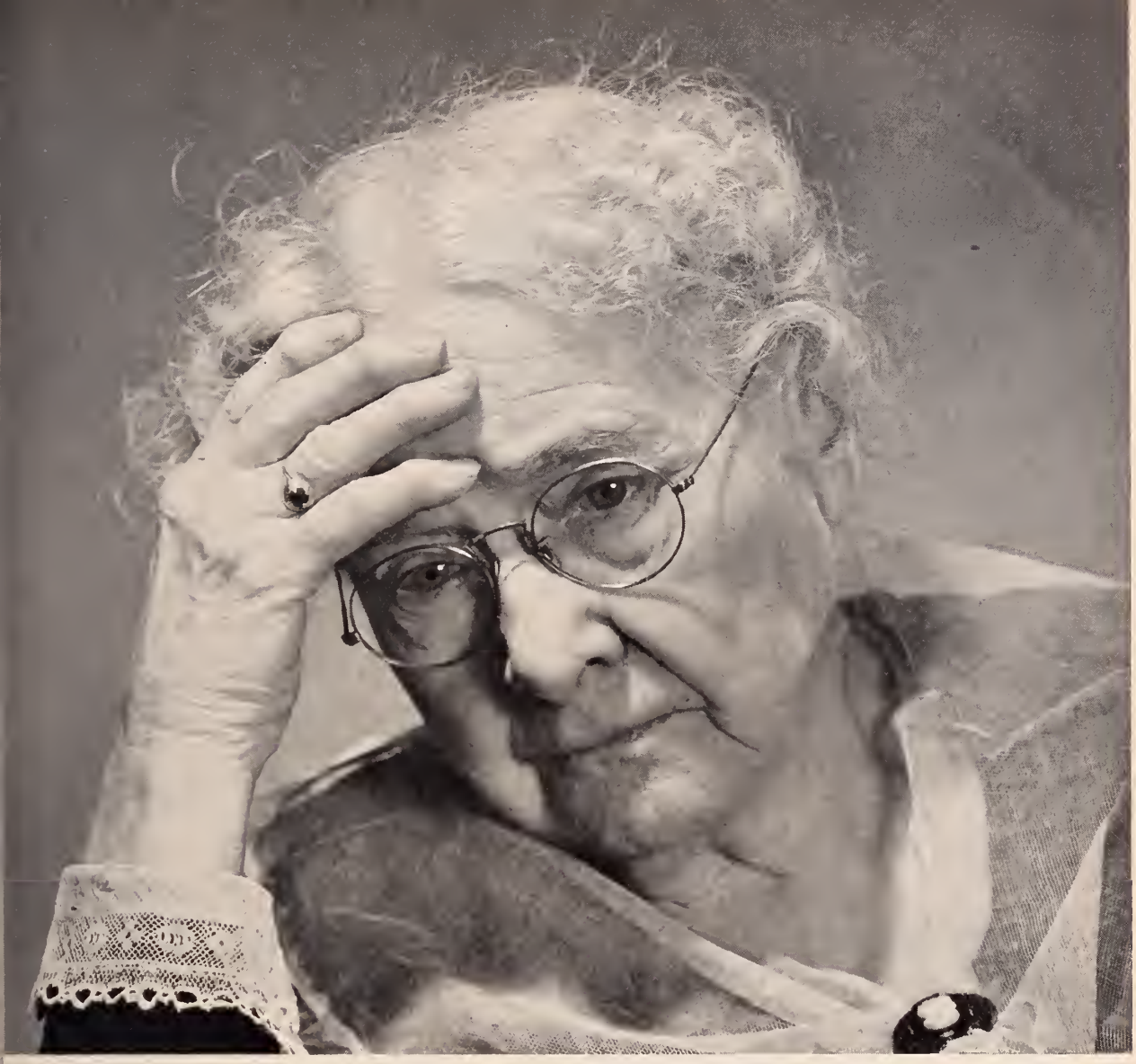
Tuberculin matriculation is a feasible method in tuberculosis control in small towns and rural areas if public health nurses are available. The development of infection may be followed from an early stage and the spread of the disease traced. Moreover, it gives information for a clearer insight into the epidemiology. The facts permit us to consider tuberculosis as a disease which can be fought by epidemiological means which permit early detection and treatment of primary infections and their infectious sources. The lower the infection rate is in a region, the more important is the epidemiological approach compared with other mass examination methods. As tuberculosis decreases, it becomes important to combine tuberculin matriculation with general health examinations. This plan leads to decentralization of tuberculosis control and to closer and more permanent supervision of the "healthy" population.

Mass radiography as a screening mechanism, though of importance in cities and in persons past middle age, will not be the basic method in the long run. By repeated tuberculin testing it is possible to uncover fresh primary infections and to focus control efforts on the most important group —recently infected persons. X-ray examination of uninfected persons is thereby avoided.

Another valuable supplement is BCG vaccination of exposed persons. However, in regions with low infection rates, mass vaccination will be scarcely practical. A steadily increasing number of persons has to be vaccinated and protected against a diminishing threat. Most important, mass vaccination deprives us of the power to distinguish between the infected and the uninfected making X-ray examination of all the population necessary. Finally, a cardinal factor in making a correct prognosis of a primary tuberculous infection is the knowledge of the time of onset. This factor cannot be known in a vaccinated population.

Therefore, it is concluded that tuberculin matriculation is the fundamental principle in tuberculosis control of the future in regions or populations with low infection rates. The less frequent the occurrence of tuberculosis, the more selective the method must be.

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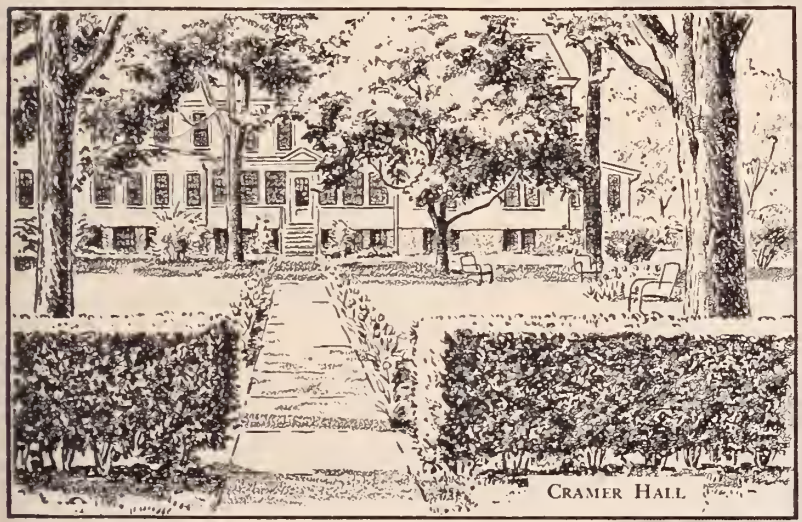
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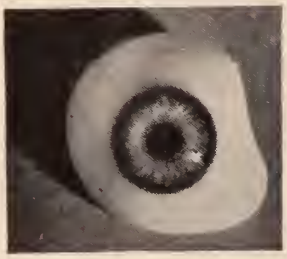
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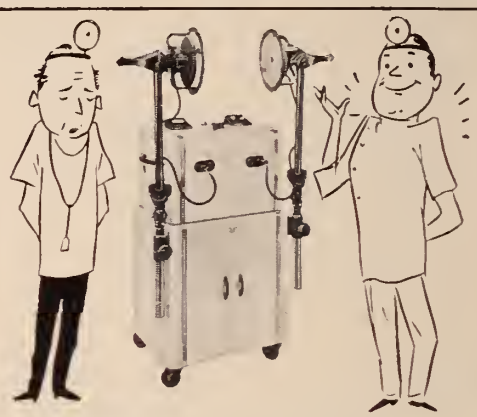
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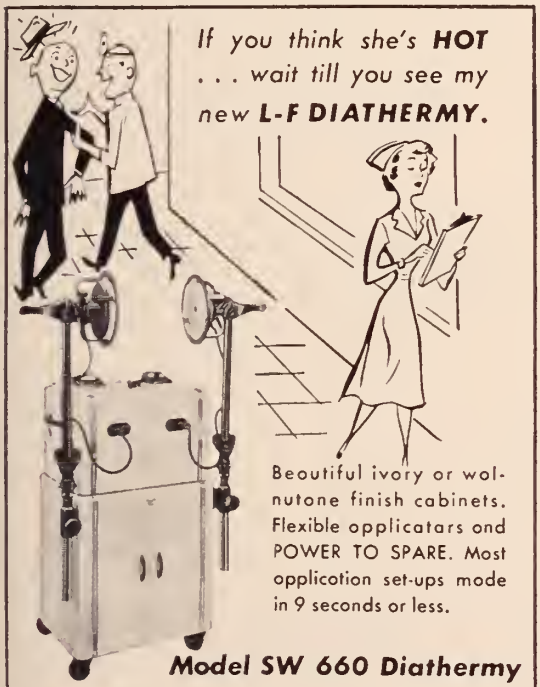
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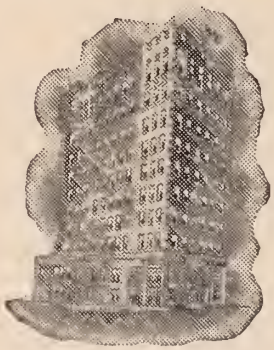
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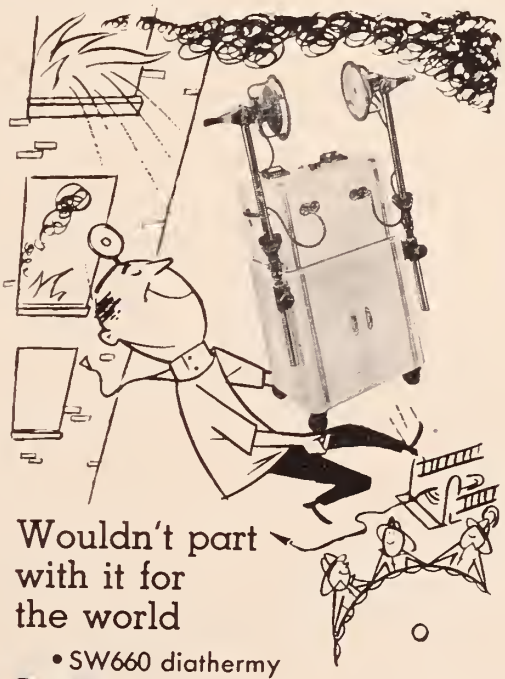
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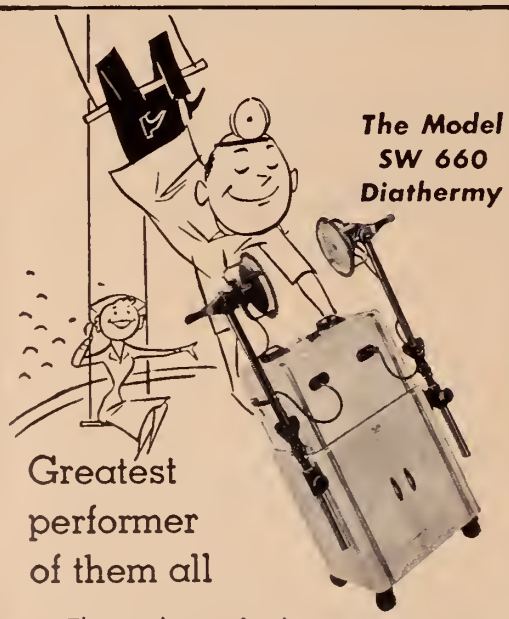
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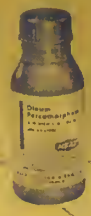
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CONTENTS—Pages 443 to 486

EDITORIALS— Page

DIABETES DETECTION DRIVE 443

EMPLOYING THE HANDICAPPED 444

STATE SOCIETY PHOTOGRAPHER 445

ORIGINAL ARTICLES—

THE ANATOMY OF THE VEINS OF THE HUMAN HEART WITH SPECIAL REFERENCE TO NORMAL ANASTOMOTIC CHANNELS—Victor Parsonnet, M. D., Newark, N. J. 446

GLAUCOMATO-CYCLITIC CRISES—Jonathan L. Harris, M.D., Newark, N. J. 453

EVALUATION OF CERTAIN NEWER PRODUCTS IN ARTHRITIS THERAPY—John W. Gray, M.D. and Evelyn Z. Merrick, M. D., Newark, N. J. 456

BERIBERI HEART DISEASE—Marvin C. Becker, M.D., Asher Yaguda, M.D. and Eugene J. Tyrrell, M.D., Newark, N. J. 462

ORIGINAL ARTICLES— Page

POSTOPERATIVE URINARY SUPPRESSION: NEWER CONCEPTS OF CAUSE AND TREATMENT—Samuel E. Kramer, M.D. and Bernard M. Kramer, M. D., Perth Amboy, N. J. 468

CAROTID SINUS SYNDROME—John G. Rogers, M.D., Riverton, N. J. 473

ANNOUNCEMENTS 477

STATE ACTIVITIES—

Trustees' Meetings 478

PUBLIC HEALTH NEWS 479

OBITUARIES 479

COUNTY SOCIETY REPORTS 481

BOOK REVIEWS 482

TUBERCULOSIS ABSTRACTS 485

Roster of Officers, Advertising Page 3A

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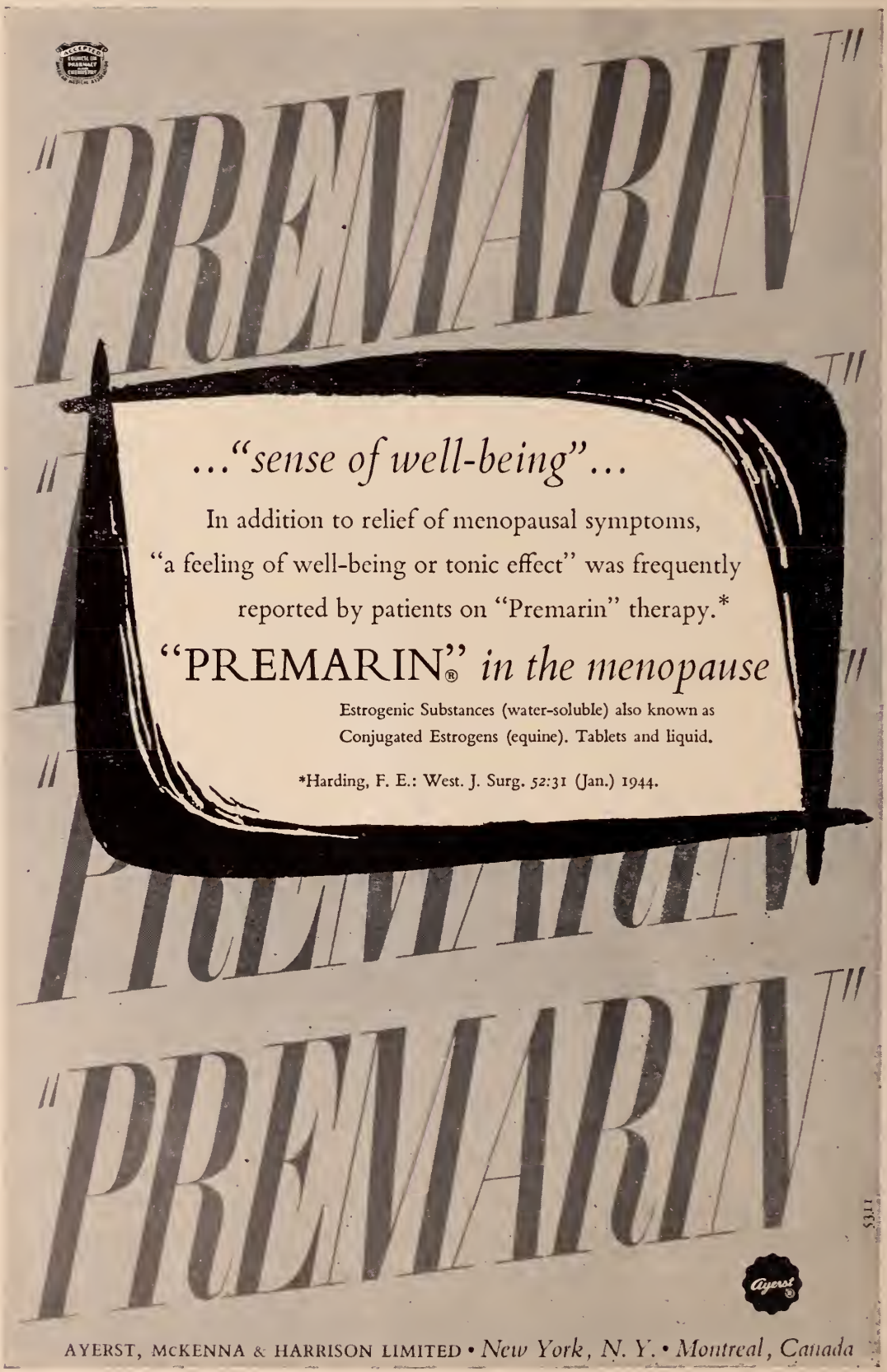
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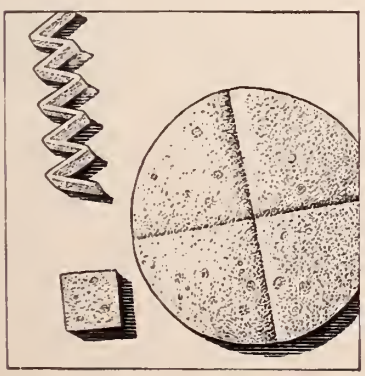
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BIBLIOGRAPHY: *1. Humphreys, P., et al.: Angiology 3:1 (Feb.) 1952. 2. Plotz, M.: New York State J. Med. 52:2012 (Aug. 15) 1952. 3. Dailheu-Geoffroy, P.: L'Ouest-Médical, vol. 3 (July) 1950.*

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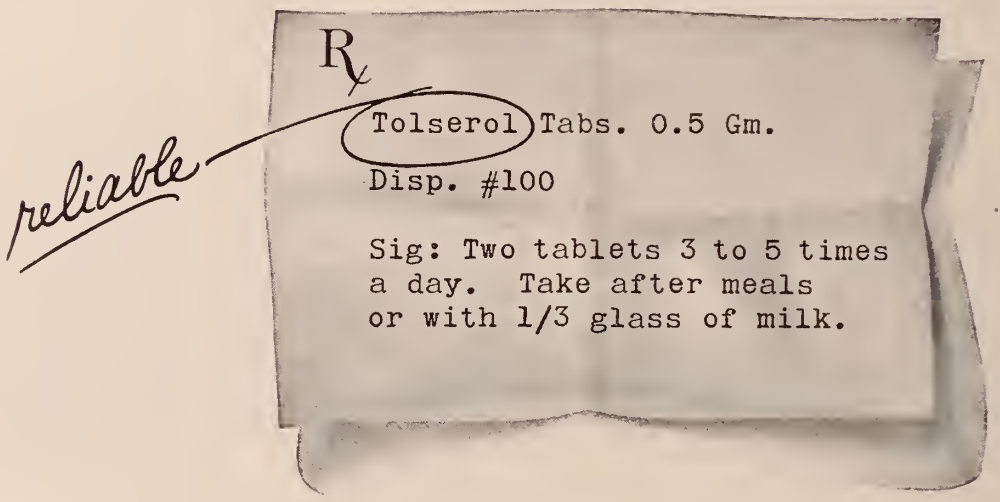
"Terramycin is generally well tolerated, the percentage of relapses being low and the percentage of bacteriological as well as clinical cures high."[2]

1. Ferguson, C., and Miller, C. D.: J. Urol. *67*:762 (May) 1952.
2. Trafton, H. M., and Lind, H. E.: Ibid. *69*:315 (Feb.) 1953.
3. Blahey, P. R.: Canad. M. A. J. *66*:151 (Feb.) 1952.

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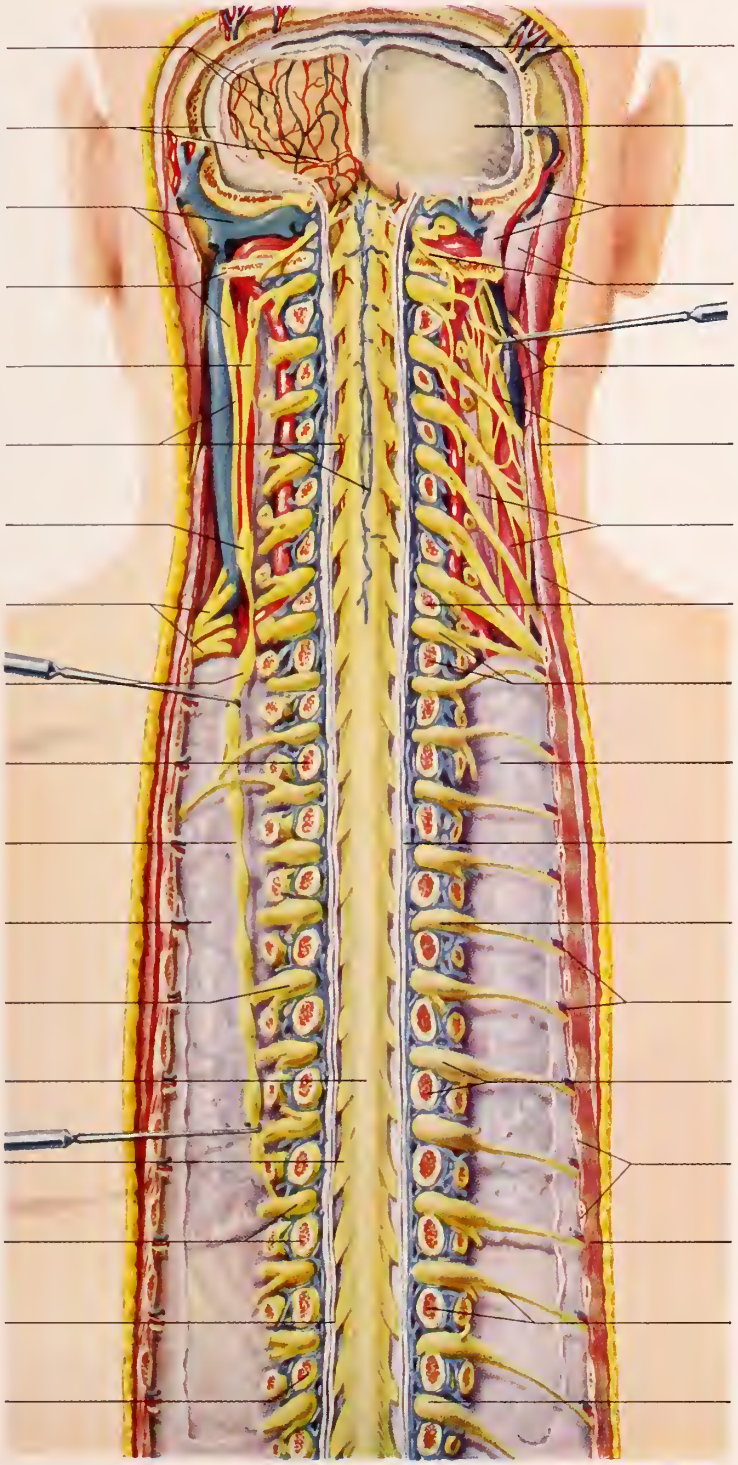
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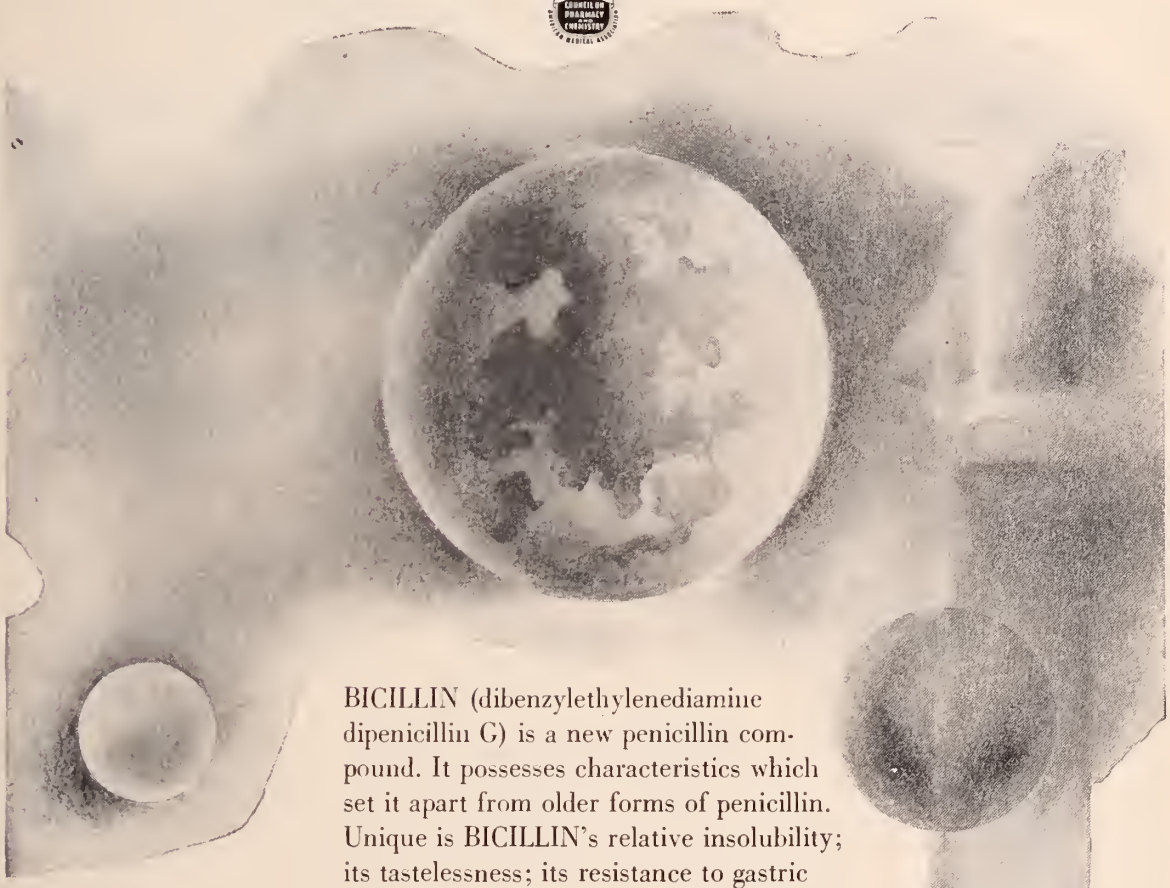
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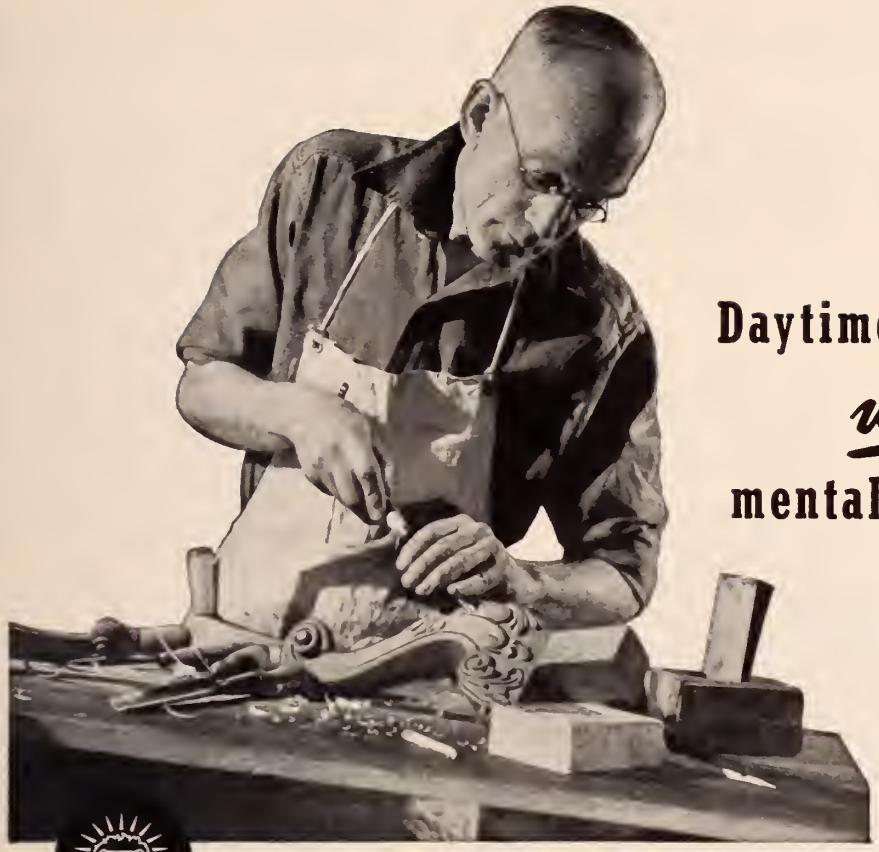
d1-Desoxyephedrine Hydrochloride	2.5 mg.
Phenobarbital (caution: may be habit forming)	5.0 mg.
Methylcellulose	70.0 mg.
Magnesium Trisilicate	50.0 mg.
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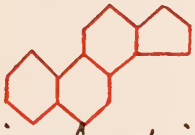
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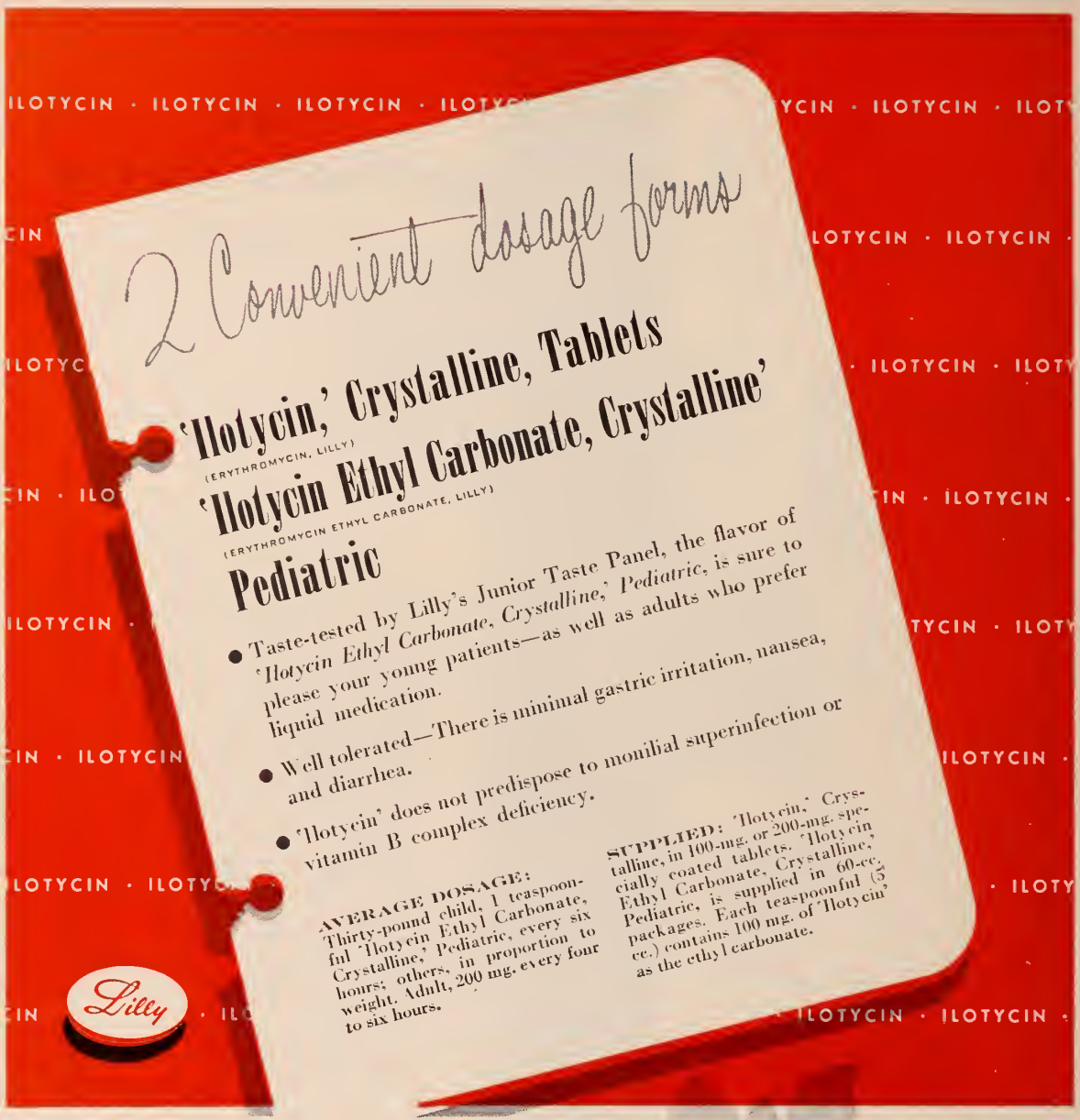
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DIABETES DETECTION DRIVE

Diabetes presents urgent problems, not only to the treating physician entrusted with management of all but the most complicated cases, but also to specialists in almost every field.

Emphasis in the treatment of diabetes has shifted recently from the more dramatic aspects of life-saving procedures to the challenge of the so-called "complications." The increase of these complications bears a direct relationship to the fact that the life span of diabetics has been lengthened.

The magnitude of the problem is doubled by the knowledge that in addition to the million known diabetics there are an estimated one million persons in this country whose diabetes has not yet been discovered and, consequently, not controlled. There are also indications that as many as three million more individuals may be potential diabetics.

Because of these facts, the American Diabetes Association has undertaken to alert the physician and general public to the danger. Every year the A.D.A. organizes a Diabetes Detection Drive in order to discover the unknown diabetic. The earlier diabetes is discovered and brought under control and the sooner the patient is informed about his condition, the better are his chances of living a normal and useful life.

This year November 15 to 21 has been designated as Diabetes Detection Week. In cooperation with the State Department of Health the New Jersey Diabetes Association hopes to reach a large segment of the population. All members of The Medical Society of New Jersey are urged to help make this drive successful.

Diabetes Week will be spearheaded by a Governor's Conference on Diabetes on October 14, and a symposium on diabetes at the Academy of Medicine in Newark on October 21.

O. B.

EMPLOYING THE HANDICAPPED

A major problem in the management of patients with chronic illness and physical handicaps is their industrial rehabilitation. It is often difficult to convince businessmen that handicapped employees can make a real contribution to industry. Moreover, the implications of workmen's compensation and accident and health insurance (so-called "sick" benefits) mitigate against the employment of persons who are considered "poor risks" from the insurance point of view even when they may be otherwise qualified for a job. This is especially so with certain disabilities such as tuberculosis or heart disease, for a relapse which occurs on the job may mean considerable expense to the insurance carrier concerned. For this reason, such patients are frequently discriminated against when they seek employment following affliction with a chronic disease.

On the other hand, the current labor shortage, and the awareness that handicapped employees frequently have a lower absentee rate and better production record than the nondisabled, have stimulated some progressive corporations to hire the handicapped and study the effects, both on the patient and on the company's production record. The experiences of one such concern, Northrop Aircraft, Inc.,[1] are worthy of report.

The employment of handicapped personnel by this corporation consisted of two phases: assignment of work projects to hospitalized patients and the employment of disabled personnel in the plant itself.

The inpatient employment study was conducted at the Birmingham General Hospital, Van Nuys, California. Here, patients who were considered too ill mentally or physically for discharge were employed in a workshop. Even some bed patients were given small jobs, for which they were paid at the same rates as those doing similar jobs in the factory. The therapeutic value of this return to active employment was gratifying.

Assignment of tasks was done with the close cooperation and under the supervision of hospital physicians. Bed patients were able to make small assemblies, sort scrambled nuts, bolts and rivets from sweepings, and put together simple wiring units. Those in wheel chairs or on crutches were given bench work, which consisted of hand finishing of parts, drilling, burring, polishing, etc. Special simple drills and fixtures were provided to fit the particular needs of the patients. The work produced was of good quality, and the production rate equalled that achieved in the factory by nonhandicapped workers. The morale-boosting effect of giving hospitalized patients useful employment was exceptionally valuable. Previously listless and apathetic patients were returned to a normal mental state by giving them useful jobs and paying them for their work. Many of these patients were better fitted to find employment after discharge from the hospital, and a sizeable percentage of these veterans were employed by the Northrop Corporation itself with excellent results. The important lessons to be learned from this project are the need for close cooperation between the hospital staff and the industry concerned and the value of fitting the job to the patient.

In this particular industrial study, two questions were investigated: 1) how does a large manufacturer successfully integrate the handicapped into his operations, and 2) how profitable is this operation from a purely business point of view?

Northrop Aircraft employs about 2000 handicapped personnel, including the blind, deaf, paraplegics, amputees, cardiac patients, and others including almost every other kind of noncommunicable physical disability.

The first essential in the large-scale employment of handicapped persons is genuine interest on the part of management in the success of the program, whether motivated by humanitarian interests or the need for added manpower. The medical department is then charged with the responsibility of studying each handicapped applicant with respect to his abilities and disabilities, and of cooperating with the personnel department in the proper placement of the individual. Since it may be very harmful to

1. Northrop, J. K.: Training and Employing Handicapped Workers. Occupational Health, January, 1953.

overestimate a handicapped employee's capabilities, it is better to underestimate in the early training and adjustment phase. Supervision must be friendly during the period of indoctrination, and surveys must be made frequently to determine the success of the placement.

The blind have made an exceptional adjustment to industrial employment. Some do highly skilled work and, based on merit alone, have won repeated increases in pay and responsibility. They are able to make complicated electrical, hydraulic and mechanical assemblies with a lower rejection and higher production rate than the average employee. They often complete thousands of hours of production without loss of even a minute due to an industrial mishap.

A comparative study was made of the productivity of handicapped and nonhandicapped employees by the Northrop Corporation. Impaired and unimpaired persons were matched as nearly as possible by age, experience, and work conditions. Results showed that handicapped workers produced equally as well, and in some respects, better than did the nonhandicapped. They were more regular in their attendance, and had a better record with nondisability-on-the-job injuries. Their production rates were as good as, or better than average.

This report is important in many respects. It serves as a factual basis for convincing business men of the value of employing handicapped workers. It also indicates the therapeutic value of devising special employment methods for disabled patients. In addition to the morale and industrial production aspects, such projects will enlarge the manpower pool, and enable these patients to take their places in their communities as independent, economically productive citizens, removed from the rolls of relief and welfare agencies, and less dependent financially on funds from compensation sources.

STATE SOCIETY PHOTOGRAPHER

Mr. Joseph Merante, a professional photographer of New York City, for the past thirteen years has had the authorization of the State Society to visit its members and, with their permission, to photograph them. In consequence of Mr. Merante's efforts over the years, the Executive Offices has been building a file of photographs of all the members of the Society, to be used as needed in conjunction with the Society's activities.

Mr. Merante makes no charge for the file photograph which he supplies, nor is there any obligation to the member who sits for his photograph.

This fall, Mr. Merante is beginning another tour of New Jersey. He is particularly desirous of making contact with members not previously photographed, and with those whose pictures were taken sufficiently long ago to require a new sitting.

A complete photograph file would be immensely valuable to your State Society. Therefore it is our hope that you will oblige Mr. Merante when he calls.

ORIGINAL ARTICLES

THE ANATOMY OF THE VEINS OF THE HUMAN HEART WITH SPECIAL REFERENCE TO NORMAL ANASTOMOTIC CHANNELS*

Victor Parsonnet, M. D.,† Newark, N. J.

This detailed anatomic study of the veins of the heart casts doubt on the efficacy of arterializing the coronary sinus as a means of improving perfusion of the myocardium with oxygenated blood.

Arterialization of the cardiac veins for the purpose of increasing the blood supply to the myocardium in coronary artery disease has been reported recently by several investigators.[1-6] Therefore a re-evaluation of the normal anatomy of the veins of the human heart, with special reference to major anatomic variants and anastomotic pathways, was undertaken. Thirty normal human hearts were studied by injection of the cardiac veins with a barium sulfate-agar mass, with subsequent x-ray films as a guide to dissection.

A composite diagram of the normal anatomy of the major cardiac veins as depicted in standard anatomy texts is illustrated in figure 1.[7] There are two to four major veins draining the left ventricle, the most constant of which are the middle, great, and posterior cardiac veins. Only one of the five texts referred to includes a fourth vein, the left marginal vein, which empties into the great cardiac vein.[7a] The anterior cardiac veins, two to three in number, which open separately into the right atrium, are said to drain the right ventricle. A minute tributary of the coronary sinus, the small cardiac vein, runs along the base of the right ventricle, and sometimes receives the right marginal vein. A second small vein, entering the superior aspect of the coronary sinus, the oblique vein of the left atrium, is said to be a remnant of the left superior vena cava.[7d]

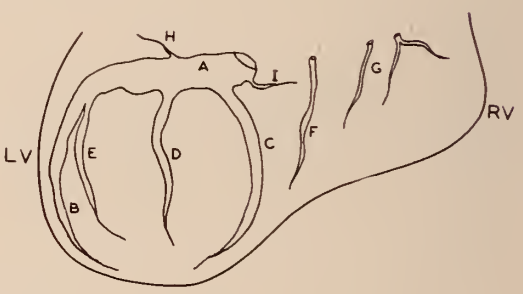


Figure 1. Composite diagram of anatomy of cardiac veins as depicted in five anatomy texts. LV—left ventricle, RV—right ventricle, A—coronary sinus, B—great cardiac vein, C—middle cardiac vein, D—posterior cardiac vein, E—left marginal vein, F—right marginal vein, G—anterior cardiac veins, H—oblique vein of left atrium, I—small cardiac vein.

A careful anatomic study of the cardiac veins was performed by Gross,[8] using an injection technic similar to the one reported here. He described an anastomosis between the great and middle cardiac veins (vena interventricularis anterior and vena interventricularis posterior), and an infrequent anastomosis between the middle cardiac vein and right marginal vein (vena interventricularis posterior and vena marginis acuti). Other variable anastomotic channels were noted. The relative incidence of these anastomotic pathways was not reported.

The Thebesian veins, or smallest cardiac veins, are usually described as minute vessels which drain the myocardium and empty directly into the heart chambers.

* From the Departments of Laboratories and Surgery, Newark Beth Israel Hospital. Aided by a grant from Norman Karpf to the Research Foundation of the Newark Beth Israel Hospital. Presented at the hospital on February 5, 1953.

† Formerly resident in surgery, Beth Israel Hospital, Newark. Winner of the first annual Harrison S. Martland Award, presented by the Essex County Pathological and Anatomical Society. Now in military service.

The anatomy of the capillary network, sinusoidal system, Thebesian veins, and their intercommunications has been studied in detail by many investigators.[6,9-11] The method employed in our study is not applicable to the study of the capillary circulation. It does define, however, the major veins of the epicardium and their anastomoses.

METHOD

A glass cannula was inserted into the coronary sinus ostium and fixed in place by a purse-string suture. The heart was placed in a warm water bath, and, after irrigation of the veins with water, a barium sulfate-agar mass was injected directly from a 30 cc. syringe under gentle manual pressure. It had been found by experience and controlled manometric trials that manual pressure did not exceed 50 millimeters of mercury. Immediately after injection the heart was placed in cold or ice water for at least 20 minutes to allow the mass to gel.

Unrolling of the heart was performed by the technic described by Schlesinger.[12] After x-ray pictures of the unrolled heart were taken, the veins were dissected, with the film as a guide, and the findings recorded on tracings of the x-ray film.

Serial sections one centimeter thick of the left ventricle were made for additional study. In three instances x-ray films of these sections were taken. In all cases complete dissection and histologic examination were performed.

RESULTS

The major cardiac veins are in the epicardium and are therefore easily dissectable throughout most of their course. Veins present in over 50 per cent of hearts are represented diagrammatically in figure 2.

The smaller veins and venules which drain the myocardium run at almost right angles to the major veins into which they empty. In the left ventricle these vessels drain only the outer two-thirds of the myocardium, as demonstrated by x-ray films of multiple gross serial sections of injected hearts (figure 3).

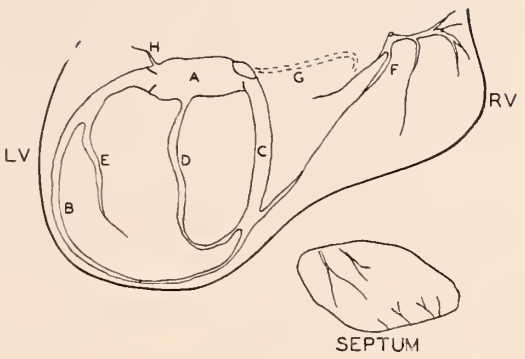


Figure 2. Diagram of veins present in over 50 per cent of hearts studied. The subendocardial vein of the right atrium (dotted lines—G) is present in only 23 per cent of hearts, but is included here to illustrate its position. Note left ventricular anastomotic rings, large anastomotic channel to anterior cardiac veins, and single ostium of anterior cardiac veins. A—coronary sinus (straight lines represent valves), B—great cardiac vein, C—middle cardiac vein, D—posterior cardiac vein, E—left marginal vein, F—anterior cardiac veins, H—oblique vein of left atrium.



Figure 3. X-ray picture of one centimeter serial sections of left ventricle of injected heart. Note that the major veins extend only about two-thirds through the myocardium. Dotted line represents approximate endocardial surface. The capillary and subendocardial sinusoidal system does not fill with this method of injection.

The *coronary sinus* runs in the posterior coronary sulcus; it measures from 1.5 to 5.3 cm. in length with an average of 3.5 cm. Into it drain directly or indirectly all the major veins of the heart with the exception of those on the anterior surface of the right ventricle and the Thebesian veins (figures 1 and 2). In Table 1 is shown the relative frequency with which the major veins were found in this series of normal human hearts.

TABLE 1.

Frequency of Occurrence of Major Cardiac Veins

Great cardiac vein	30	(100%)
Middle cardiac vein	30	(100%)
Posterior cardiac vein	19	(63%)
Left marginal vein	22	(73%)
Small cardiac vein	11	(37%)
Right marginal vein	4	(13%)
Oblique vein of the left atrium	29	(97%)

The *oblique vein of the left atrium*, present in all but one of the hearts studied, always drains into the coronary sinus at its superior aspect just proximal to the distal valve of the sinus. This vein if present, therefore, may serve as an operative guide to the localization of the distal end of the coronary sinus.

The *anterior cardiac veins* join and empty through one ostium (figures 4-5) in 63 per cent of cases, and through two ostia in 27 per cent. In two hearts only one large anterior cardiac vein was present, emptying into the small cardiac vein and thence into the coronary sinus. In these cases the separate ostium into the right atrium was absent. The single ostium of the anterior cardiac veins is usually hidden behind the larger group of pectinate muscles of the atrium, about midway between the right auricular appendage and the coronary sinus ostium. The anterior cardiac veins, which were not separately injected, filled with injection mass in 87 per cent of cases via anastomotic channels from the major branches of the coronary sinus. These veins are sometimes quite large; however, they do not always appear so on the x-ray films because their ostia are open, allowing mass injected into the coronary sinus to pour into the atrium without completely filling the veins.

In seven of the thirty hearts studied (23%) an undescribed anatomical variant was demonstrated, termed the *subendocardial vein of the right atrium*. This vessel is illustrated in



Figure 4. Heart No. 3. X-ray of unrolled, injected heart. Cannula in coronary sinus ostium, and hemostat at left ventricle apex. The left ventricular anastomotic ring anastomoses to anterior cardiac veins, and single anterior cardiac vein orifice are clearly seen.



Figure 5. Heart No. 10. Anastomotic ring of left ventricle connecting great and posterior cardiac veins (ring cut across near hemostat near apex during unrolling of heart). Again note single anterior cardiac vein orifice, and large anastomoses to anterior cardiac veins.

figures 6-8. Its course is parallel to and two centimeters above the tricuspid valve ring; it usually opens into the atrium just within the ostium of the coronary sinus directly beneath the Thebesian valve. On occasion its ostium is separate from and to the right of the coronary sinus ostium. Throughout most of its length it lies beneath the endocardium or in the myocardium of the right atrium, but toward its distal end is more superficial, lying beneath the epicardium. Here it usually anastomoses with one of the anterior cardiac veins, where it may have another ostium into the right atrium. The vein may originate near the pectinate muscles, receiving only a few small branches from the right ventricle and atrium, or it may extend across the entire base of the right atrium, receiving all the anterior cardiac veins. In heart *27*, illustrated in figures 6-7, all the anterior cardiac veins empty into this subendocardial vein, and have no separate ostia into the atrium.



Figure 6. Heart No. 27. X-ray picture of injected heart with the coronary sinus and the subendocardial vein of the right atrium injected separately. In this case all the anterior cardiac veins drain into the subendocardial vein of the right atrium, and empty into the atrium only through that vein. The coronary sinus here is only 1.5 cm. long. Note the oblique vein of the left atrium entering the sinus just proximal to the distal valve of the sinus (small transverse line to the left of large cannula).



Figure 7. Photograph of opened subendocardial vein of right atrium, same heart as figure 6. Right atrium is seen above the vein, and tricuspid valve and right ventricle below it.



Figure 8. Heart No. 8. Photograph of another heart with a large subendocardial vein of the right atrium. At the left the vein dips outward toward the epicardium beneath the larger papillary muscles of the right atrium. The cannula in the coronary sinus is at the right.

Gross states that the small cardiac vein (vena coronaria dextra) may frequently lie above the right auriculo-ventricular groove in the musculature of the right atrium. This is approximately the location of the subendocardial vein herein reported. In three of the seven cases in which the subendocardial vein was present, a small cardiac vein was also present; this speaks against these veins being identical.

The *Thebesian veins* are usually not dissectable. However, in four cases of this series,

atrial ostia were found into which drained sizeable venous channels. In two of these cases it was possible to cannulate and inject these vessels, one of which had a large, direct communication with the great cardiac vein adjacent to its entrance into the coronary sinus; in this instance, mass injected into the sinus immediately poured into the atrium through this large anastomotic route. Some of the ostia of the Thebesian veins were found in the left atrium. Other small ostia were found occasionally in the endocardium of both atria, but could not be injected. These were dissectable for only a few millimeters into the myocardium.

The anterior, basilar aspect of the interventricular septum is drained by a few small veins into the great cardiac vein; the posterior septum is drained by a few veins into the middle cardiac vein.

All the major veins described receive numerous, inconstant, smaller branches, most of which contribute to a fine anastomotic network of veins in the epicardium. However, as already indicated, many of the major veins connect with each other via dissectable anastomoses, so that two rather constant venous anastomotic rings can be described (figure 2). The larger and more constant (90%) connects the ends of the middle and great cardiac veins, so that the borders of the left ventricle are almost demarcated by a continuous venous pathway (B-C, figure 2). The second, and less constant ring (70% of cases) connects the ends of the posterior and left marginal veins with a branch of the middle cardiac vein (D-C, figure 2). In three hearts the only ring present was an anastomosis between the posterior cardiac and great cardiac veins (figure 5).

Further evidence of rich anastomoses is the fine network of venules easily seen on the x-ray films. In 87 per cent of hearts the anterior cardiac veins, not directly injected, filled well via collateral circulation. Seventy-seven per cent of these cases had major dissectable communicating branches from either the middle or great cardiac veins. The remaining 23 per cent filled via the smaller network of veins, without dissectable anastomoses.

The valves of the coronary sinus were small and inconstant. Eighty-seven per cent of hearts had a thin valve at the ostium of the middle cardiac vein, 37 per cent at the posterior cardiac vein, and 80 per cent at the end of the coronary sinus just beyond the point of entry of the oblique vein of the left atrium. The valves of the sinus did not offer any resistance to the injection mass, all branches filling immediately on injection of the sinus. The valves were not wide enough to reach across the lumens of the veins, especially after distention of the veins with the injection mass. The ostium of the coronary sinus is partially covered by the Thebesian valve. The anatomy of this valve and the coronary sinus orifice has been reported in detail by Hellerstein and Orbison.[13]

DISCUSSION

The anatomy of the major veins of the heart is rather constant, and corresponds closely to the standard textbook descriptions. Although the left marginal vein is rarely mentioned in standard texts, in this series of hearts it was a rather constant feature (73%).

The role of the anterior cardiac veins in the human heart has not heretofore been stressed, although their importance has been demonstrated in dog hearts.[14,15] The frequency with which these veins connect with the veins of the coronary sinus probably indicates an important role in the venous drainage of the heart. Contrary to previous descriptions, these veins usually drain through one ostium, and occasionally anastomose with the subendocardial vein of the right atrium as described. It was not possible to determine the functional or anatomic significance of the atrial subendocardial vein in this study, except that it may occasionally drain all the anterior cardiac veins.

The frequency and size of the anastomotic network of epicardial veins was striking. Several large venous rings of the left ventricle exist, in addition to rich anastomoses between the left ventricular veins and those of the right ventricle.

It has been shown repeatedly that ligation of the coronary sinus in dogs frequently results in death from hemorrhagic infarction of the left ventricle. However, many animals survive this procedure; large venous collateral

channels appear in those animals that survive.[1-4, 14-19] If complete ligation of the coronary sinus were attempted in humans, the large left ventricular anastomotic ring could serve as an alternate route for venous return to the right atrium, assuming, as is usually the case, that the middle cardiac vein is not ligated. However, in 10 per cent of human hearts this venous anastomotic ring does not exist, and in these cases ligation of the sinus would be attended by a greater risk of hemorrhagic infarction of the left ventricle. (See figure 5.)

The objective of reversal of the circulation in the heart is to force oxygenated blood into the capillary bed from the venous side. It is of interest to note that if one were to ligate the coronary sinus in humans just distal to the entrance of the middle cardiac vein, this vein would in effect no longer be a tributary of the coronary sinus, but would drain into the right atrium through the former coronary sinus ostium (see figure 2). If it were possible to force oxygenated blood by way of the distal, ligated coronary sinus and its tributaries to the capillary bed, only the myocardium thus supplied by oxygenated blood would benefit. However, the myocardium drained by the middle cardiac vein would not receive oxygenated blood because this vein would no longer be a tributary of the sinus. Normally the middle cardiac vein drains a portion of the base and posterior surface of the left ventricle and interventricular septum, a substantial area of myocardium. This area of the myocardium would not be protected against the effects of arterial occlusion.

If, on the other hand, oxygenated blood were to reach the middle cardiac vein by way of anastomotic channels, the blood would drain into the atrium as it does normally. Here again, the myocardium drained by the middle cardiac vein probably would not benefit from the reversed circulation.

In the above discussion it has been assumed that it is possible to supply the myocardial capillaries with oxygenated blood from the venous side. Several investigators believe that this is open to question. For example, Johns, Sanford and Blalock[4] found in their experiments on the reversal of the circulation in dog hearts that little oxygenated blood reaches the smaller veins, and all the epicardial veins dilate and short-circuit the blood back to the atrium.

In the gross sense the veins of the heart are similar to those of the extremity, in that they provide alternate routes of flow of blood returning from the tissues. The valves of the cardiac veins, however, are ineffectual against any sizeable reverse pressure, whereas those of the veins of the extremity are usually more effective.

This gross anatomical similarity of the veins of the heart and extremity is important in the light of certain animal experiments. It has been shown in the dog that arterial blood shunted from the proximal end of the divided femoral artery into the distal end of the divided femoral vein, will not reach the capillary bed to any great extent. Instead, the blood, utilizing major venous anastomotic channels, leaves the arterialized femoral vein by way of the first communicating branches, and returns to the central circulation via collateral veins.[20,21] When these collateral veins are ligated in an effort to force the blood into the capillary bed by way of the arterialized vein, the capillary bed cannot withstand the arterial pressure, blood will extravasate into the tissues and necrosis will ensue.

A comparable phenomenon has been demonstrated in the dog heart. Simultaneous ligation of the coronary sinus and arterialization of the distal sinus produces hemorrhagic infarcts of the myocardium. This is especially true if the collateral veins (the anterior cardiac veins) are ligated.[14,15] A parallel may exist between the venous systems of the heart and extremity when one stage reversal of the circulation is attempted experimentally.

It has been demonstrated in this study that numerous, large, venous anastomotic channels are present in the normal human heart which might serve as alternate routes of venous return in attempts at reversal of the circulation. Therefore it is problematic whether sufficient oxygenated blood shunted into the ligated coronary sinus could reach the capillary bed of the myocardium.

SUMMARY

1. The normal anatomy of the major veins of the human heart is studied by an injection technic.

2. A hitherto unreported subendocardial vein of the right atrium is described.

3. From this study it is evident that there is a constant, rich anastomotic network of veins in the epicardium, forming several venous rings. These rings, plus frequent large anastomoses with the anterior cardiac veins, provide numerous pathways of venous return to the right atrium. The bearing which these anastomoses have on the feasibility of coronary sinus arterialization deserves further consideration.

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B_{12} IN ACUTE HEPATITIS

Because there is no definitive treatment of viral hepatitis, usual therapy consists of efforts to stimulate repair of hepatic cells by bed rest and a high protein, high caloric diet. In a recent study of 300 patients with this disease, done at the U. S. Army Hepatitis Center in Japan, Campbell and Pruitt* report encouraging results with the addition of vitamin B_{12} to the usual "liver" regimen. Their results show that patients receiving B_{12} exhibited a more rapid return of normal appetite and liver size than did control patients, total serum bilirubin values returned to normal more rapidly, and their mean duration of illness, as measured from the onset of first symptoms to return of normal liver functions tests, was shorter. The relapse rate among those treated with B_{12} was lower than among controls.

* Campbell, R. E. and Pruitt, F. W.: Vitamin B12 in the Treatment of Viral Hepatitis. Am. J. Med. Sc., September 1952.

GLAUCOMATO-CYCLITIC CRISES

REPORT OF TWO CASES

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Two cases which fulfill the diagnostic criteria of this recently reported syndrome are described, and its characteristic features are outlined.

The syndrome of glaucomato-cyclitic crises was first described by Posner and Schlossman in 1948,[1] and several times in the literature since then. The syndrome is characterized by the following features:

1. The disease is unilateral.
2. The same eye is always affected.
3. There is high ocular tension without corresponding severity of signs or symptoms. The eye is white or practically so, and there is no corneal edema. Pain is minimal to moderate.
4. The presenting symptoms are usually moderate headache around the affected eye, and slight blurring of vision.
5. The pupil of the affected eye is definitely larger than that of the other eye and extremely sluggish in its reaction to light.
6. Slit lamp examination shows a few round gray keratitic precipitates numbering from five to twenty. An aqueous beam is absent or questionable. Some cases show heterochromia.
7. The condition tends to disappear spontaneously with a normalization of tension. Attacks last from a day to a month.
8. The fields of vision and visual acuity remain normal.
9. Gonioscopy shows an open angle.
10. Provocative tests during symptom-free periods are negative.
11. Recurrences occur at varying intervals.

CASE REPORTS

Case 1—S. W., a 37-year old white male, was first seen on December 13, 1951. While undergoing examination by an internist he described attacks of pain near his right eye during which he saw halos around lights. About a year previously he had been given foreign protein injections by an ophthalmologist. At the time of this first eye examination he showed no significant findings. External examination was negative. The vision was 20/20 in each eye. A small hyperopic refractive error was present. The media and fundi were entirely normal. The tension of the right eye was 26 millimeters of mercury, and the left, 23 (Schiotz, 7.5). He was dismissed with instructions to return if ocular symptoms recurred.

He returned on January 2, 1952 stating that he had noticed halos around lights with his right eye for about twenty-four hours. He was not in pain. The external examination of the eyes was again normal. The pupils were equal, regular, and reacted normally. The vision was 20/20 in each eye. Visual fields were done before tonometry and showed a questionable enlargement of the blind spot on the right. The peripheral fields were normal. Tonometry showed tension, right eye—60, left eye—26 (Schiotz 7.5). A drop of pilocarpine 1% was instilled in the right eye. Within one-half hour the pupil dilated widely. Careful check showed that a mydriatic had not been used inadvertently. The tensions of the eyes at the end of one-half hour remained the same, 60 in the right, and 26 in the left. This time a drop of Floropryl® 0.1% and pilocarpine 1% were instilled in the right eye. At the end of another half hour the pupil of the right eye remained dilated and the tensions were the same, 60 in the right and 26 in the left. There was moderate headache present. The right eye showed no signs of congestion. Pilocarpine 2% every two hours was prescribed and the patient advised to return the following morning. No corneal edema was present grossly or microscopically.

The next day the patient had no pain in the eye, but there was mild occipital headache. The visual halo had disappeared. The vision in each eye was 20/20. The pupil of the right eye was smaller than it had been the previous day, but remained moderately dilated and sluggish compared to the left. There was no congestion of the right globe. The tension had dropped to 34 in the right eye and 22 in the left. At this examination the right iris was observed to be somewhat lighter in color than the left. A few small, grayish, round keratitic precipitates were seen in the lower central corneal area.

He was next seen on January 7, 1952. The right pupil was still slightly larger than the left. The tension was 23 in each eye. Pilocarpine 2% was stopped in the left eye, where it had been given prophylactically. He was advised to continue using pilocarpine in the right eye at bedtime.

The next visit was on February 19, 1952. The only complaints were slight blurring of near vision and dull ache in back of the right eye. A refractive error of plus 1.25 in both eyes was discovered, and a prescription for rest glasses was given. The tension was 19 on the right and 23 on the left.

One month later, on March 18, 1952, he returned with a complaint of hazy vision in the right eye. The pupil was moderately dilated and sluggish. Tension was 39 in the right eye and 23 in the left. A few keratitic precipitates were noted in the center of the cornea. One drop of cortisone, 0.5%, every

two hours was ordered, according to the recommendation of Billet.[2] The following day tension was 50 in the right eye and 26 in the left. Cortisone was continued and on March 22, 1952, the tension was 30 in the right eye and 25 in the left.

The patient was not seen again until February 19, 1953, eleven months later. This time he came in for routine follow-up. He stated he had had slight haziness of vision in the right eye almost every night, and a frequent sensation of moderate discomfort in the eye. However, he also said that the pain of the previous attacks, when tension was elevated, was much more severe. Examination showed equal, normally reactive pupils. The tension was 23 in each eye. Fundus examination was completely normal. Peripheral and central fields were normal. Gonioscopy showed no abnormality of the angle. No keratitic precipitates were seen on slit lamp examination.

Case 2—C. W., a 52-year old white female, was first seen on November 20, 1952. Her main complaint was pain over the right eye with a sensation of pressure. This had been annoying her for the previous two weeks. She had had poor vision in the left eye since childhood. Past medical history included a gastric ulcer for which she had taken antispasmodic medication. However, she had discontinued this medication nearly a year before the present illness.

Eye examination showed vision right, 20/20, left 20/400. External inspection showed a definite pupillary inequality with a six millimeter pupil on the right and a three millimeter pupil on the left. The pupil on the right reacted very slightly to light, while that on the left reacted promptly. There was no corneal edema. Ophthalmoscopic examination showed a small, fresh, flame-shaped hemorrhage in the upper temporal quadrant of the right eye. In the left eye there was a patch of old, inactive chorioretinitis between the disc and the macula, which accounted for the severe loss of vision in that eye. A drop of Paredrine Hydrobromide®, 1%, was instilled in each eye prior to ophthalmoscopy, and produced moderate pupillary dilation before tonometry was performed. The tension was 54 in the right eye and 32 in the left (Schiotz 10). A solution of 2% pilocarpine was ordered four times daily.

Two days later, the right pupil had become smaller than the left (right, 2 mm., left, 3 mm.). Tension was right 43 and left, 30. There was no corneal edema. Headache was somewhat diminished.

On November 24, 1952, the tension on the right was again over 50. Left was 23. A few small, round, gray keratitic precipitates were seen in the right eye with the slit lamp microscope. A few cells were present in the anterior chamber. There was still no corneal edema. At this visit, cortisone, 0.5%, was ordered in the form of drops to the right eye every two hours. The vision remained 20/20, right and 20/400, left. Central and peripheral fields showed some enlargement of the blind spot in the right eye.

On November 28, 1952 the tension had equalized to 25 in each eye. The hemorrhage in the right fundus appeared to be absorbing. Laboratory reports showed a fasting blood sugar of 82 mg. per cent, a normal sedimentation rate, no abnormality of blood nitrogen, and negative urinary findings. In view of the normal ocular tension, pilocarpine was discontinued in both eyes, but cortisone drops were continued in the right eye.

On December 1, 1952, the tension in the right eye was 20 and the left 26. The aqueous appeared slightly turbid with a faint flare. Cortisone was continued. The right pupil had again dilated to 4 mm.

On December 4, 1952, the tension was right, 23 and left, 25. The fundus hemorrhage had practically disappeared. Headache was less. Cortisone was continued.

A week later, the twenty-first day, vision was 20/20, right, and 20/400, left. Tension was 26 in each eye. The central field was rechecked and a normal size blind spot was present. Inflammatory signs in the aqueous were minimal. A few keratitic precipitates were still present.

On December 18, 1952, the findings were essentially the same as those of the previous week. It was noted that the pupil of the right eye was definitely becoming smaller, but was still four millimeters as compared to three millimeters in the left eye.

On December 26, 1952, a provocative water drinking test was performed. The patient reported in the morning without breakfast and without fluid intake since before midnight. An initial tension was taken and one quart of water was drunk within ten minutes. The tension was taken periodically. The results are given in the following table:

TIME	TONOMETER SCALE READING (Schiotz 7.5)		INTRA-OCULAR PRESSURES IN MM. OF MERCURY	
	RIGHT	LEFT	RIGHT	LEFT
9:05	5.5	5.5	28	28
9:07-17	Four Glasses of Water			
9:30	4.0	4.5	34	32
9:45	5.5	5.5	28	28
10:00	4.5	4.5	32	32
10:15	4.0	4.5	34	32
10:30	4.0	5.0	34	30
10:45	4.5	5.0	32	30

The results of this test showed no undue lability of the intraocular fluid control, although it was felt that the overall tension tended to be on the high side of normal in both eyes. Cortisone was continued in the right eye.

On January 6, 1953, the tension in both eyes was 26. The pupil of the right eye was still slightly dilated and sluggish. The hemorrhage had absorbed completely from the right fundus. The headache had gone. Cortisone was reduced to one drop daily.

On January 20, 1953, the tension was 26 in each eye. The right pupil remained slightly dilated. A few keratitic precipitates, about ten in number, persisted. Cortisone was discontinued. The patient was dismissed to return in several months for follow-up, or at any time symptoms recurred.

DISCUSSION

The cases presented fulfill the conditions required for a diagnosis of glaucomato-cyclitic crises. The two cases differ in certain definite

features, which are of some interest in comparison. In Case 1 the patient was normal when first seen; within three weeks he showed a definite attack with normalization of tension within five days. A second attack occurred about six weeks later, with tension returning to normal within four days. In Case 2 normalization of tension required eight days. In Case 1 pupillary changes were rapid and bizarre. The involved eye displayed a pupil which returned quickly to normal size with the passing of the attack. In Case 2 the pupil remained dilated and sluggish for over a month. In Case 1 a paradoxical reaction to pilocarpine was noted in the form of a dilated pupil. Duke-Elder[3] states that a partial parasympathetic paresis evidenced by a dilated pupil can occur after the effect of pilocarpine, which stimulates the parasympathetic end-apparatus directly, wears off. This would seem to indicate a considerable variation from the normal in the chemistry of the pupillary autonomic control. Floropryl®, 0.1% did not produce a miosis in this state. In Case 2 a retinal hemorrhage was seen, which absorbed after a week. In the absence of any evidence of hypertensive, renal, or diabetic disorder, this hemorrhage might be interpreted as due to some disturbance of the intraocular circulation, secondary to the greatly increased pressure. In Case 2 a severe loss of vision was present in the uninvolved eye, making accurate evaluation even more essential than usual. In Case 1 a follow-up after nearly a year was available, which showed no evidence of glaucomatous deterioration, although the interval history was suspicious.

The paradoxical pupillary findings are of interest. It is not unheard of to find an occasional patient with a dilated pupil and signs of a mild uveitis. Ordinarily untreated uveitis displays a constricted pupil. The patient denies use of any drops in the eye, but is usually regarded with suspicion by the ophthalmologist. The tension may be a low normal. It is quite possible that such instances are examples of glaucomato-cyclitic crises after the tension has normalized. Certainly the condition must be considered as an important differential diagnosis in all cases of obscure pupillary inequality.

From the viewpoint of therapy, surgery is contraindicated, as the condition thus far has proved benign, even after long observation,[2] and without adverse effect on central visual acuity or visual fields. In addition, surgery does not prevent recurrence of attacks. Recommended therapy consists of mild solution of pilocarpine (¼ to 1%), and ophthalmic suspension of cortisone locally as drops. The cortisone is used because of its apparent therapeutic effect in anterior ocular inflammations. Miotics have no apparent action, but are used for traditional reasons.

It is felt that the immediate underlying mechanism of the syndrome is associated with an allergic state of the ciliary body. More fundamentally there may be some disturbance of the hypothalamus and the autonomic nervous system.[1]

Before 1948 occasional case reports appeared which on retrospect appear to fall into the category of glaucomato-cyclitic crises.[4,5] Additional case reports based on the fundamental work of Posner and Schlossman are beginning to appear in the literature.[6,7]

SUMMARY

Two cases, which fulfill the requirements of the diagnosis of glaucomato-cyclitic crises, have been described. The proper diagnosis of this condition is extremely important both from the point of view of treatment and prognosis. The literature on this subject is gradually increasing.

31 Lincoln Park

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EVALUATION OF CERTAIN NEWER PRODUCTS IN ARTHRITIS THERAPY*

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Experience with phenylbutazone and intra-articular hydrocortisone in the treatment of various forms of joint disease is presented, with a discussion of the relative effectiveness and indications for each.

Among the recent preparations offered on the market for the treatment of arthritis are two chemically unrelated products, phenylbutazone (Butazolidin®), a diphenyl-pyrazole derivative, and hydrocortisone (compound F), an adrenal steroid. These two, because of their effectiveness, deserve special consideration.

Clinical results in 135 cases will be described.

PHENYLBUTAZONE

Phenylbutazone was developed as a solvent for the parenteral use of aminopyrine. It was soon learned, however, that the vehicle was the more potent ingredient in the combination.

Little is known of the pharmacology of phenylbutazone except that it is a powerful analgesic. Whether or not it is an anti-inflammatory agent in the human has not been determined.

A summary of our observations in 83 cases is shown in Table 1.

There were 40 rheumatoid arthritis cases, 6 rheumatoid spondylitis, 2 brucellosis arthritis, 4 single nonarthritic conditions, 7 each of osteoarthritis and traumatic arthritis and 17 gouty arthritis.

The stage of the disease in the rheumatoids, according to the criteria of the American Rheumatism Association, is the extent of arthritic involvement, ranging from mild (I) to severe (IV). This plan was also followed in rheumatoid spondylitis and brucellosis arthritis. The other groups were listed as acute or chronic, early or advanced. It will be noted that nearly one half of the rheumatoids were stage IV and one-quarter of the gouty cases had irreversible destructive changes.

The treatment period for all groups ranged from 2 weeks to 9 months.

The amount in grams signifies the minimum and maximum doses given in each case, from 4 grams to 86.4 grams. The dosage, as a rule, was 800 mg. daily for the first week, 600 mg. the second week, 400 mg. the third week, 200 mg. for a variable period, and 100 mg. or less for maintenance in certain cases.

Before starting treatment the patient was questioned regarding peptic ulcer or gastrointestinal symptoms and was examined for cardiac, renal and vascular disease. With agranulocytosis in mind, an initial blood count was done and then periodic leucocyte counts, the frequency depending on the size of daily doses; weekly for 800 - 400 mg., every 2 weeks for 200 mg., monthly for 100 mg.

Among the 83 cases, undesirable reactions occurred in 19 (23%). These included seven gastric, six cutaneous, two with peripheral edema, two with leucopenia, one with cardiac decompensation and one with unusual fatigue. For the slightest toxic manifestation the drug was temporarily discontinued.

In six cases, (7%) it was deemed advisable to completely interrupt the therapy. Reactions in this group included the following:

Two had gastric disturbances with rather severe stomach symptoms lasting two to three weeks after the drug was discontinued.

One patient had cardiac decompensation with no indication of organic heart disease prior to treatment but a subsequent electrocardiogram showed old myocardial damage.

One had edema and a rising blood pressure.

One developed severe generalized dermatitis, similar to serious gold rash, on the tenth day of treatment; this cleared in 10 days on antihistamines and cortisone.

One had leucopenia on 200 mg. daily; in the 4th month, the leucocytes numbered 3500, granulocytes 40%; the white blood count returned to

* From the Arthritis Clinics, St. Barnabas Hospital, Newark, N. J. and New Jersey Orthopaedic Hospital, Orange, N. J. Presented before the Section on Rheumatism at the Annual Meeting of The Medical Society of New Jersey in Atlantic City on May 18, 1953.

TABLE 1

PHENYLBUTAZONE (BUTAZOLIDIN®) IN ARTHRITIS (83 CASES)

Disease	Number of Patients	Stage*				Treatment Period	Amount Used (Grams)	Toxic Reactions		Grade Improvement				Notable Degree (I and II)
		I	II	III	IV					I	II	III	IV	
								Gastric	2					
								Rash	2					
								Cardiac decompensation	1					
Rheumatoid Arthritis	40	4	6	12	18	2 - 30 weeks	4.2 - 86.4	Edema and elevation of blood pressure	1	0	14	20	6	35%
Rheumatoid Spondylitis	6	1	0	1	4	3 weeks to 6 months	7 - 75	Gastric	1	0	5	1	0	83%
Brucellosis Arthritis	2	1	1	0	0	2 - 4 weeks	5.6 - 8.4	Gastric Rash	1 1	0	1	1	0	
Bursitis	1	Chronic				4 weeks	5.4	None		0	0	1	0	
Fibromyositis	1	Chronic				12 weeks	54	None		0	1	0	0	
Wry Neck	1	Chronic				6 weeks	5.8	None		0	1	0	0	
Menopausal Arthralgia	1					10 days	4.0	Rash (severe)	1	0	0	0	1	
Traumatic Arthritis	7	Subacute Chronic			2 5	2 - 24 weeks	4 - 24	Gastric Rash	1 1	0	2	5	0	29%
Osteoarthritis	7	All advanced				2 - 6 months	10 - 72	Edema Leucopenia	1 1	0	2	5	0	29%
Gouty Arthritis	17	Early Moderately advanced Advanced			3 10 4	2 weeks to 9 months	5 - 48	Gastric Rash Leucopenia Unusual fatigue	2 1 1 1	13	4	0	0	100%

* According to criteria established by American Rheumatism Association.

normal soon after stopping the drug but fell again after resumption.

We saw no purpura and no significant decrease of blood platelets. Excessive doses were avoided. Our maximum dose of 800 mg. daily was continued for only a short period.

If contraindications for the use of phenylbutazone are heeded, dosage directions followed, and if one is on the alert for side reactions, we believe its dangers are minimal. That the drug is being given without thought of consequences was emphasized the other day when a patient stated she had taken four Butazolidin® tablets daily for four months without blood tests.

The grade of improvement ranged from complete remission (I), major improvement (II), minor improvement (III) to complete lack of effect (IV). Only (I) and (II) were included in determining the notable degree of response to therapy.

Approximately one third of the 40 rheumatoid cases showed notable improvement and then only on relatively large daily doses. In the spondylitis group, however, the percentage was 83 per cent although the disease was as advanced as the peripheral rheumatoids. One of the brucellosis cases, and the fibromyositis and wry neck cases showed major improvement. The results in traumatic arthritis and osteoarthritis were not encouraging. Thirteen of the 17 gouty arthritis cases had complete remissions and 4 major improvement (these 4 cases were in an advanced stage of the disease). Notable improvement was achieved in 100 per cent.

When using phenylbutazone for palliative purposes, as in rheumatoid arthritis, we may have to make a choice between it and cortisone. For comparative advantages of each see Table 2.

Phenylbutazone and cortisone are a boon to the rheumatologist in making the patient comfortable while conventional management for building up resistance and maintaining functional capacity are employed.

Because of our remarkable results with phenylbutazone in gouty arthritis, a more detailed discussion of the 17 cases treated is in order. Acute attacks were promptly controlled and maintenance doses of 100 to 200 mg. daily were established in a short time. Only one case developed an attack and he neglected to take the medication as directed.

Many of these patients while on our usual gout treatment had frequent recurrences prior to the use of phenylbutazone. To cite a case, we treated a young man who had 8 attacks in 10 months while on dietary restrictions, colchicine, 0.1 mg. (grain 1/60), daily and in addition 50 milligrams of cortisone daily a part of the time. For the last attack on July 1, 1952, phenylbutazone, 800 mg., daily was prescribed. After the third tablet, pain was relieved. The dose was reduced to 100 mg. daily at the end of the first month. For the past 9 months he has been on a maintenance dose of 100 mg. daily—a period of 10 months without relapse. (We are now trying 50 mg. daily doses for prophylactic purposes).

In the above case the blood uric acid was rapidly reduced from 6.8 mg. per cent to 2.2 mg. Thirteen of our 17 cases had hyperuricemia and responded similarly. The chemical or metabolic action of this drug which produces such remarkable reversals in gout requires future determination.

TABLE 2

COMPARISON OF PHENYLBUTAZONE AND CORTISONE IN RHEUMATOID ARTHRITIS

Phenylbutazone	Cortisone
Less cardiac strain.	More complete reversals.
Less water imbalance.	Less toxicity.
Safe in certain disease states, e.g., tuberculosis, psychotic trends, hyperthyroidism, diabetes.	Less irritating to gastrointestinal tract.
No Cushing syndrome.	No rashes, except acne.
No "hypercortisonism."	No hematopoietic depression: no agranulocytosis; frequent blood counts unnecessary.
No lowered resistance to infection.	Anti-inflammatory effect may delay deformities in earlier cases.
	Side effects infrequent with present dosage.

Phenylbutazone appears to have a specific effect in gouty arthritis. It not only promptly controls acute attacks but minimal daily doses prevent recurrences. In rheumatoid arthritis its palliative effect is often a therapeutic asset. It is apparently more effective in rheumatoid spondylitis than in generalized rheumatoid arthritis. In the allied non-arthritic rheumatic conditions the effect is variable and unpredictable. Phenylbutazone is a drug which must be used with regard for its toxic potentialities.

HYDROCORTISONE (COMPOUND F)

The second new product under discussion in arthritis therapy is hydrocortisone.

This hormone is closely related to cortisone. The only difference in the steroid nucleus is the replacement of a hydroxyl radical for a ketone group at C_{11} position.

The first comprehensive report on the intra-articular effectiveness of hydrocortisone as compared with cortisone in rheumatoid arthritis was published by Hollander[1] in December, 1951. Earlier conclusions regarding its mode of action, on a basis of difference in solubility, elimination and antirheumatic effects have had to be revised in the light of more recent research. Further studies, particularly of the metabolism of these hormones at the tissue level, should eventually bring the explanation of their effectiveness.

The technic of joint injections is described in the legends for figures 1 and 2.

The hip joint is the most difficult to inject because of its anatomical relationships. Furthermore, since so many of these hips are "dry" (without effusion), fluid cannot be withdrawn to verify the presence of the needle within the joint cavity.

The injection of intervertebral joints with hydrocortisone is definitely contraindicated.

An analysis of the 52 cases treated is shown in Table 3.

The same standard plan for denoting the stage of disease and for grading the results was adopted as in Table 1.

We have in the rheumatoid group 15 cases, bursitis 10, osteoarthritis 9, and traumatic arthritis 18.



Figure 1. The knee joint is the most common site of injection and the technic is not difficult. Tincture of iodine is applied to the skin and procaine is used locally. A 20 or 22 gauge, one and one-half inch needle is inserted 1 to 2 centimeters mesial to the midpoint of the patella and between the patella and femur into the joint cavity. If there is effusion, the fluid is aspirated before injecting hydrocortisone.



Figure 2. The temporomandibular joint injection requires a knowledge of the anatomy of the area. If a surface marking is made one-half inch anterior to the tragus of the ear on a line drawn from the tragus to the ala of the nose, the superficial temporal artery is avoided. The needle is inserted at this point to a depth of one-half inch.

Eleven of the 15 rheumatoid cases were treated for knee involvement which was either a single persistent rheumatoid joint or an exacerbation following a twist or strain. Effusion and tender menisci were frequently observed in these latter joints.

TABLE 3

HYDROCORTISONE (COMPOUND F) INJECTIONS IN JOINTS AND BURSAE

321 Injections in 52 Cases — February 1, 1952 to March 1, 1953

Disease	Stage	Number of Patients	Site Injection	Number of Injections	Duration Treatment	Relief Period		Grade Improvement I	II	III	IV	Notable Degree (I and II)
Rheumatoid Arthritis	I	2	Knee	11	2 weeks to 6 months	1 week or less	9	0	9	5	1	60%
	II	2	Hip	2		1 - 4 weeks	4					
	III	3	Wrist	1		2 - 8 weeks	1					
	IV	8	Jaw	1		2 months	1					
		15	Shoulder (Left 7)	9	1 week to 8 months	1 week	3	4	5	1	0	90%
						2 - 4 weeks	1					
	Acute	5				1 - 6 months	5					
Bursitis	Chronic	5	Popliteal	1								
		10		51								
Osteo-arthritis	Earlier	4	Knee	6	2 weeks to 7 months	None	1	2	5	1	1	78%
			Hip	1		1 - 2 weeks	3					
	Advanced	5	Shoulder	1		3 - 10 months	4					
		9	Finger	1		1 year	1					
				56								
Traumatic Arthritis	Acute	8	Knee (Left 12)	16	1 week to 13 months	1 week or less	4	6	9	3	0	90%
			Jaw	1		1 - 3 weeks	8					
	Chronic	10	Finger	1		1 - 6 months	7					
		18		125								

It might be of interest that 7 out of 9 shoulders treated and 12 out of 16 traumatic knees were on the left side. All patients were right-handed.

A total of 321 injections was given, each patient receiving from one to thirty. The dosage was 5 milligrams for the finger, 10 to 15 milligrams for the temporomandibular joint and 25 to 50 milligrams for the knee. Duration of treatment covered 1 week to 13 months. The relief period lasted 1 week to 1 year. Note the relatively short period in rheumatoid arthritis as compared with all the other groups.

None of the rheumatoids had complete remissions, 9 showed major improvement, or 60 per cent notable improvement. Although the over-all improvement in rheumatoid arthritis was relatively low there are times when the intra-articular use of hydrocortisone is of special value: (a) when a single large joint has failed to respond to other treatment including cortisone; (b) intra-articular hydrocortisone has no systemic effect and therefore is safer than prolonged large doses of cortisone; (c) when cortisone is contraindicated as in cardiac decompensation, peptic ulcer, hyperthyroidism, etc., (d) when a weight-bearing joint, especially the knee, is the offender rehabilitation is hastened.

Intra-articular hydrocortisone may prove to be important in controlling hand deformities. We have started injecting the metacarpophalangeal joints, inflammation of which is primarily responsible for ulnar deviation. Results of the project will be reported at a later date.

In the 9 osteoarthritis cases, the relief periods were, for unknown reasons, longer than in rheumatoid arthritis. Beneficial results are probably dependent upon the degree of secondary inflammation, for there is no diminution in the bony proliferation.

We were especially interested in the comparative results in the treatment of three aged patients in advanced stages of osteoarthritis, involving the knee, the hip and the shoulder, respectively. All showed the same extensive hypertrophic and destructive changes in x-rays and no benefit was expected in any of them. To our surprise, one was relieved of pain and

functional capacity was restored for a long time.

The bursitis and traumatic arthritis groups might be discussed together since bursitis is essentially traumatic in origin and since an equally high percentage of notable improvement (90%) was obtained in each of these groups.

In the 10 bursitis cases, 5 were acute and 5 chronic. Four of the 5 acute cases responded promptly with complete and lasting remissions. After only one injection, a painful popliteal bursal swelling disappeared completely.

In the traumatic arthritis group, there were 18 cases, 16 with knee joint involvement. In all of these there was history of injury such as strain, direct blow, or fracture affecting the joint. There was effusion in 5, a tender mesial meniscus in 7, complicating osteoarthritis in 6 and "pending litigation" in 3. One had symptoms and x-ray evidence of a "joint mouse" but cleared up completely after 7 injections of hydrocortisone with no recurrence for the past 6 months. In the temporomandibular case, there was history of dislocation. After 3 injections of 15 milligrams on each side, the pain, tenderness and limitation of jaw motion cleared and there has been no relapse during the past seven months. The three that showed only minor improvement were suffering from complicating rheumatoid arthritis. The more lasting results in traumatic arthritis as compared with rheumatoid arthritis may be attributed to the lack of underlying chronic inflammation and productive changes in the traumatic form.

Hydrocortisone injections are most effective in acute traumatic arthritis and acute bursitis. It has a place in the treatment of osteoarthritis when there is an associated secondary inflammation. This hormone when used intra-articularly in rheumatoid arthritis is of special value when persistent involvement of a weight bearing joint, especially the knee, is retarding rehabilitation.

REFERENCE

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142 Clinton Avenue

INTRAVENOUS ANESTHESIA IN OBSTETRICS AND GYNECOLOGY

The use of intravenous sodium pentothal anesthesia in 1301 major obstetric and gynecologic cases has recently been reviewed by Mazzola,† *et al.* These authors found that continuous intravenous anesthesia has several advantages: 1) Induction is rapid and easy, with no coughing, excitement, struggling or emesis; 2) Dosage is easily controlled; 3) Recovery is rapid; 4) Postoperative complications and hypotension are rare; 5) It can be used as a supplemental agent.

Intravenous anesthesia should be administered by a well trained anesthetist, using a freshly prepared solution.

This form of anesthesia is recommended for nervous and apprehensive patients, patients who fear inhalation anesthesia, patients intolerant to pain of local, regional or spinal injections, and debilitated patients It is contraindicated in cardiacs with dyspnea, in toxemia, or where there is an obstruction of the airway. It is also not advised for cesarean section because of the danger of fetal asphyxia. It is an ideal anesthetic for gynecologic operations by the vaginal route and for poor risk patients, especially when other forms of anesthesia are not advisable. It can be supplemented with nitrous oxide and *d*-tubarine hydrochloride when further relaxation is required. In this group of patients, an average dose of 1.5 grams was used, with an occasional case requiring 1.75 to 2 grams.

† Mazzola, V. P., Mazzola, N. J., and Pico, L.: Intravenous Anesthesia in Major Obstetric and Gynecologic Surgery. Am. J. Surg., October 1952.

BERIBERI HEART DISEASE*

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Beriberi heart disease is occasionally seen among certain segments of our population. Its incidence, etiology, pathology, diagnosis and treatment are outlined in this report, with an illustrative case presentation.

It has been a long time since Jacobus Bontius, a Dutch physician, discouraged by the "meagre earnings of his practice because of the poor remuneration received and the competition of quacks" joined the East India Company, sailed for Java and there wrote the first European description of beriberi sometime between 1627 and 1631.[1] Medicine has also come a long way since "dense and sticky phlegmatic" humors were considered the cause of beriberi.[2] In spite of the monumental advances in the elucidation and prevention of deficiency diseases, beriberi is still prevalent in the United States in the endemic form. Apparently it will remain as long as there is chronic alcoholism, drug addiction and food faddism. Therefore our index of suspicion must always remain high. This paper reports a case of beriberi with predominant cardiovascular symptoms and serves as a springboard for a review of the changing concepts of this disease, particularly in relation to the heart.

CASE REPORT

C.C., a 48-year old white male bartender was admitted to the Newark City Hospital on February 26, 1953 with the chief complaint of sudden shortness of breath which awakened him from sleep one and one-half hours prior to admission. The present illness began approximately three weeks before, when he noted the onset of peripheral edema, and shortness of breath on walking half a city block. There was no history of precordial pain, cyanosis, or palpitation. He admitted heavy alcoholic indulgence for twenty years. Until one year before his entry to the hospital he had always maintained an adequate diet, having eaten generous quantities of meat, vegetables and fruit. For the year before admission, however, due to anorexia and frequent episodes of nausea and vomiting, he often missed meals entirely. In the last 6 months his diet consisted of whiskey, beer and an occasional sandwich. The past history was negative. There was no history of rheumatic fever, hypertension or lues. He had served in the Marines and Navy from 1920-1925 and had also passed an examination for life insurance 2 years ago.

Physical examination showed a well developed white male in acute respiratory distress with evidence of generalized anasarca and cyanosis. Temperature, 100; pulse, 120; respirations, 28; blood pressure 160/0 mm. Hg. The face was plethoric and the neck veins were distended. Fine moist inspiratory rales were heard at both lung bases. Examination of the heart revealed the point of maximum impulse to be in the 5th interspace at the left mid-clavicular line. The pulse rate was equal to the ventricular rate and regular. No thrills or rubs were palpable. A grade III systolic murmur was heard at the 3rd intercostal space to the left of the sternum. A bounding "Corrigan" pulse was felt and "pistol shot" sounds were heard over both femoral arteries. The liver was felt 3 fingerbreadths below the right costal margin. No other masses were palpable. There was two plus pitting edema of the lower extremities but no clubbing.

Laboratory studies: Complete laboratory tests of liver and kidney functions were within normal limits, as was the blood urea nitrogen and fasting blood sugar. A complete blood count revealed: hemoglobin 81 per cent (Sahli), red blood cells 4.0 million per cu. mm., white blood cells 14,500 with a slight shift to the left. The blood Wassermann test was negative. Of significance was a venous pressure of 235 mm. The circulation times were arm to tongue (Decholin®) 17 seconds and arm to lung (ether) 5 seconds.

Roentgen study of the chest on February 26 showed enlargement of the heart to the left and evidence of marked pulmonary congestion. (Figure 1). An electrocardiogram on that date indicated sinus tachycardia and low voltage in the standard and precordial leads. It was otherwise normal.

Course: On admission the patient was treated routinely for congestive heart failure with bed rest, digitalis, salt poor diet and mercurial diuretics. His response was poor and he became somewhat lethargic. On several occasions he was found sprawled beside his bed following abortive attempts at walking. A neurologic examination revealed inability to walk or support his weight. There was weakness of both limbs, more marked on the right. There was no impairment of sensory perception, position or vibratory sensation. There were a gener-

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Figure 1. Chest X-ray on February 26, 1953 revealing cardiac enlargement and pulmonary congestions.

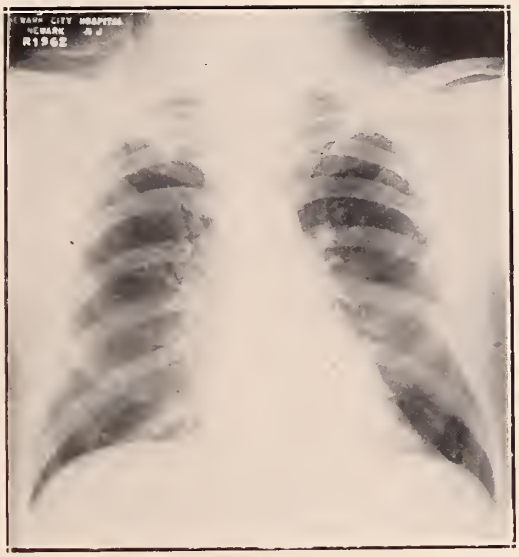


Figure 2. Chest X-ray on March 25, 1953. Note decrease in heart size and clearing of pulmonary congestion.

alized hyporeflexia and absent patellar reflexes. The cranial nerves were intact and no cerebellar dysfunction was demonstrated. A spinal tap was normal. A diagnosis of peripheral neuritis was entertained and confirmed by the neurologic service.

In view of the findings of heart failure of unexplained etiology, peripheral neuritis and poor dietary habits a diagnosis of beriberi was made and the patient was placed on high doses of parenteral thiamin chloride supplemented with other members of the B complex and vitamin C. Following this, improvement was spectacular. There was profuse diuresis and amelioration of the cardiac symptoms. Within one week he became alert and developed some power in his lower extremities. Fourteen days later he was out of bed and walked unassisted about the ward. Repeat venous pressure on March 20 was 30 mm. and the circulation times were normal. An electrocardiogram on March 24 revealed regular sinus rhythm with normal voltage. Roentgen study of the chest on March 25 revealed a normal sized heart and clearing of the pulmonary congestion (Figure 2). By this time blood pressure recordings were normal (130/80 mm. Hg.), the systolic murmur and peripheral arterial phenomena had disappeared. On April 6 he was discharged on a full diet supplemented with oral vitamin B complex and with no evidence of congestive failure, peripheral edema or peripheral neuritis. Digitalis had been discontinued for 3 weeks.

DISCUSSION

That this was beriberi heart disease seems beyond question. It meets all the criteria for diagnosis revised by Blankenhorn[3] in 1945; 1—enlarged heart with normal sinus rhythm, 2—edema, 3—increased venous pressure, 4—grossly deficient diet for three or more months, 5—no other cause of heart disease, 6—peripheral neuritis, 7—clinical improvement after specific therapy and 8—non-specific electrocardiographic changes. The "pistol shot" and other arterial phenomena due to high pulse pressure included in the old criteria of oriental beriberi of Aalsmeer and Wenckebach[4] and the early descriptions of the occidental form by Weiss and Wilkins[5] were also observed in this patient.

Beriberi is still most commonly seen in the Orient where diets of polished rice are prevalent. It was common among American prisoners of war in Japan.[24] That thiamin deficiency is responsible for beriberi is well documented.[6,7] Thiamin is an indispensable part of the metabolism of carbohydrate; the diphosphoric ester of thiamine is identical with the co-enzyme, "cocarboxylase". In the breakdown of glycogen to lactic acid, pyruvic acid is an intermediary product and cocarboxylase is necessary for the breakdown of pyruvic to lactic acid. In thiamin deficiencies there is an accumulation of pyruvates.[8]

Beriberi in this country was first reported in the writings of Scott and Hermann[9] who, in 1928, reported cardiac decompensation due to

beriberi in Louisiana in patients on vitamin deficient diets. Weiss and Wilkins,[5] in 1937, reported 120 cases of beriberi with cardiovascular as well as neurologic manifestations from the Boston City Hospital. In 1949 Blankenhorn,[10] in a 10 year study at the Cincinnati General Hospital, noted 48 cases. Fifty per cent of the cases were chronic alcoholics and one-third had cardiovascular manifestations. Most other cases of occidental beriberi have been reported in alcoholics,[3,5,6,10,11,12,13] although it has been noted in drug addicts [6] and food faddists who subsist on an essentially high carbohydrate diet.[6] Other conditions where thiamin is depleted or not utilized or where the demand is increased, may predispose to this disease or aggravate a pre-existing heart disease. Digestive disturbances, psychotic states, increased metabolism due to hyperthyroidism, pregnancy, exertion or infections may play a role.[14] Cowgill [15] has stated that the vitamin requirement bears a direct relationship to the metabolism of the body and the ingestion of carbohydrates. A high carbohydrate diet has been shown to be specially harmful and may cause an exacerbation of symptoms.[16]

The length of time necessary to develop beriberi and beriberi heart disease is not absolute but must vary with such factors as degree of hypovitaminosis, exertion, presence or absence of complicating diseases and carbohydrate ingestion. The figures quoted in the literature vary from three to eight months.[5,16] In this case it was at least 6 months.

Symptoms and Signs:—The symptoms of beriberi heart disease are variable and may simulate any other type of heart disease with evidence of congestive failure. Edema is a prominent feature, as is dyspnea, orthopnea, paroxysmal dyspnea and palpitation. In some, right ventricular failure may predominate and in others left ventricular decompensation may be outstanding. Acute left ventricular decompensation forced this patient to seek hospitalization. On physical examination there may be dependent edema or generalized anasarca. The cervical veins are prominent and distended, giving evidence of increased venous pressure. The pulse is most often rapid, and the quality at times is bounding, characteristic of a high pulse pressure. "Pistol shot" phenomena are not uncommon. The heart may be enlarged by physical examination and systolic murmurs and a gallop rhythm may be heard. On occasion failure may occur in a normal sized heart.[3,6] Diastolic murmurs have never been reported. The blood pressure may be normal or there may be a drop in diastolic pressure thereby giving a widened pulse pressure. The lungs may reveal the typical signs of congestion. Usually there are signs of peripheral neuritis and there may be co-existent pellagra or scurvy. Venous pressure is usually elevated although this is not so in all cases. Circulation times are rapid in approximately one-third of the cases.[25] Superimposed failure may give a normal circulation time. Delayed circulation time may occur [5] but is uncommon.

Roentgen studies of the chest usually show an enlarged heart with increased vascular markings. This usually regresses on bed rest and with the administration of therapeutic doses of thiamin.[6,13]

The electrocardiogram is non-specific. There may be depressed, diphasic, or inverted T waves and low voltage in the standard and precordial leads. There is usually a sinus rhythm although auricular flutter and fibrillation have been reported.[6] The P-R interval may be prolonged as may the Q-T interval. Bundle branch block, slurring of the QRS complex and ST segment elevations and depressions are reported.[17] It is also important to emphasize that the electrocardiogram may be normal in some cases. In those where it is abnormal it should revert to normal after adequate therapy but there may be a lag of three to four weeks.[11]

Pathology:—The pathologic picture varies with the duration and severity of the disease. In general it is non-specific. Aalsmeer and Wenckebach,[4] who observed very severe oriental cases, reported enormous dilatation of the right side of the heart with engorged veins, degeneration of heart muscle and fibrosis of the myocardium. This is uncommon in the occidental form. At times there may be cardiac hypertrophy or dilatation but the heart weight remains normal.[18] Histologically the heart may be normal and many lesions described in the

literature are either non-specific or often absent. The usual description is hydropic degeneration of the myocardial fibers, separation of the fibers and perivascular and interstitial edema.[18] Some cases are indistinguishable from non-specific or Fiedler's myocarditis.[16,17] In other cases mural thrombi have been observed.[19,20]

Degenerative lesions of the nervous system including the peripheral nerves, vagus, spinal cord tracts and sympathetic nervous system have been described.

Pathologic Physiology:—The syndrome of beriberi heart disease simulates the picture of high output failure as described by McMichael[21] in many respects. It thereby resembles the manifestations seen in anemia, hyperthyroidism and arteriovenous fistula. This was proved by Burwell and Dexter[22] when they catheterized the right heart in a case of beriberi heart disease.

It is felt the cardiovascular manifestations of beriberi originate in the peripheral vascular system, manifested by peripheral vasodilatation and decreased peripheral resistance which act like multiple arteriovenous shunts.[6,13] This explains the rapid circulation time, increased venous pressure, high pulse pressure and bounding "Corrigan pulse". Peripheral vasodilatation is believed due to the accumulation of pyruvic and lactic acid as a result of thiamin deficiency.

Failure is considered by Friedberg[13] to be due to thiamin deficient metabolism of the heart and increased work due to increased cardiac output and venous return. In fact, recent work[23] reveals that the hearts of thiamin deficient dogs are unable to absorb pyruvates from the blood as do the hearts of normal dogs. T wave changes in the electrocardiogram seem to correlate with the pyruvate content of the heart. These metabolic abnormalities point to a chemical rather than an organic disturbance of the heart and may explain the paucity of pathologic findings both grossly and microscopically.

Griffith[17] even raises the question as to whether beriberi heart disease is a disease of the myocardium at all or is the result of widespread neuritis. He implies that neuritis of the vagus nerve is responsible for the cardiac symptoms. He also suggests multiple vitamin deficiencies as a cause and states that the role of potassium as an etiologic factor has not been completely elucidated. He feels that beriberi heart disease might well result from a combination of myocardial, neurologic, peripheral vascular, electrolytic and protein disturbances. How simple it used to be when we were taught that beriberi heart disease was an outright vitamin B_1 deficiency!

The peripheral edema which usually precedes cardiac failure may be attributed to peripheral neuritis. There may, however, be superimposed cardiac edema and in some cases a low serum protein may be contributory.

Diagnosis:—The diagnostic criteria for beriberi heart disease have been broadened in recent years. The old criteria of Aalsmeer and Wenckebach[4] and Weiss and Wilkins[5] have been superseded by those of Blankenhorn.[3] In fact it is felt by some that the criteria should be further liberalized to include heart failure of undetermined etiology in which a thiamin deficiency may be demonstrated.[16] Although the response to thiamin is important, some feel that this is not absolutely necessary.[3,5]

In general one should consider this diagnosis in chronic alcoholics or in any other group with dietary deficiencies in whom there is peripheral neuritis and unexplained heart failure. The association of other deficiencies is contributory evidence. A normal or rapid circulation time in the presence of clinical evidence of failure should suggest beriberi if other causes of high output failure are ruled out, such as hyperthyroidism, arteriovenous fistula, anemia or fever.

Course:—In unrecognized, untreated beriberi the course is that of progressive deterioration and death. In some, sudden death may occur; in others, a chronic form may occur in which there is slow response to therapy. Surprisingly enough, if a patient develops a severe incapacitating neuritis, this disability may prevent heart failure because the ability of the patient to expend effort is markedly restricted and therefore the vitamin requirement and cardiac work are less. Severe cardiac disability often occurs in those patients with only mild

symptoms of polyneuritis who are able to continue with their usual work.

The question of residual effects from beriberi heart disease is still uncertain. Some observers feel that in spite of thiamin therapy residual damage may remain and that a chronic form of beriberi exists which may be exacerbated with the use of alcohol, exertion or other stressful conditions.[16] Griffith[17] however, did a detailed study on the cardiac status of 109 men who survived the acute effects of beriberi and malnutrition during 44 months as Japanese prisoners in World War II. The specific purpose of this project was to determine if there was residual heart disease from beriberi. He concluded that if a patient survives the acute stages and is treated adequately there is no residual evidence of heart disease. Nor did he find evidence that beriberi predisposed to a greater incidence of other forms of heart disease. In cases of recurrence he feels that probably the patients were not adequately treated with vitamins and bed rest originally.

Therapy:—Treatment consists of the administration of thiamin parenterally in doses of at least 100 milligrams daily. The diet should not be too high in carbohydrate because of its proved aggravating effect. Bed rest is extremely important, as is salt restriction, mercurial diuretics and digitalis. It is important to note that these latter measures *alone* are usually of little avail, as was demonstrated in this case. After initial improvement of cardiovascular symptoms the digitalis, salt restriction and mercurials may be discontinued. Of equal importance is the correction of the coexisting vitamin deficiencies, anemia or superimposed infection.

The response to therapy is dependent upon the severity and duration of the disease. The longer the deficiency state the less reversible are the changes. Relapses are not uncommon, so prolonged aftercare and restriction of activity must be stressed. In the acute cases rapid response is characteristic. There may be a decrease in edema in twenty-four to forty-eight hours. The decrease in heart size is slower and reaches its maximum in two to three weeks. The electrocardiogram may return to normal in two to four weeks. Relief of the neuritis usually lags behind that of the cardiac status.

SUMMARY

1. As long as there remains a focus of patients with chronic alcoholism, drug addiction or erratic eating habits, thiamin deficiency and beriberi will remain in the United States in endemic form. Hence, our index of suspicion must always remain high.

2. A case of beriberi with predominant cardiovascular symptoms is reported. The changing concepts of this disease, particularly in relation to the heart, are reviewed.

299 Clinton Avenue

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LARYNGEAL GRANULOMA

The role of endotracheal anesthesia in the pathogenesis of laryngeal granuloma has recently been emphasized by Barton.[1] Reporting four cases of granuloma of the larynx occuring after such anesthesia, he outlines three main causes for this condition: endolaryngeal trauma, extralaryngeal trauma, and infection. Among the endolaryngeal factors is traumatic intubation, where the tube is forced between the adducted vocal cords, usually posteriorly. Another is prolonged anesthesia with the tube in place. Head position is most important as a cause of endolaryngeal trauma, since it occurs most commonly with the patient in a head-down position. This forces the tube into the posterior commissure and against the vocal processes, where all reported lesions have occurred.

According to Barton, laryngeal granuloma starts as a traumatic abrasion of the vocal process which exposes cartilage and results in a perichondritis. This abrasion then becomes a so-called contact ulcer because of secondary infection. The contact ulcer next develops into a sessile granuloma as the denuded area is covered with granulations in an attempt to cover the bare cartilage. Finally, the granuloma becomes an inflammatory polyp by proliferation of the central tissue and healing or epithelization of the periphery.

Treatment consists of surgical removal when the lesion reaches the fourth stage and has a clear pedicle.

This condition may be prevented by avoiding a sharply flexed head position and striving for hyperextension, as in direct laryngoscopy. Forcing a tube through laryngeal spasm is contraindicated and use of a tube small enough to be readily passed is recommended. To avoid aspiration, a small tube with an inflatable cuff is preferred to a larger, potentially traumatizing one. During neck operations care should be taken to avoid extralaryngeal trauma, and infection can be controlled by sterile intubation technic followed by postoperative antibiotics.

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POSTOPERATIVE URINARY SUPPRESSION: NEWER CONCEPTS OF CAUSE AND TREATMENT*

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Modern concepts of the pathogenesis, physiology and treatment of anuria are presented with eight case reports.

Oliguria and anuria, two of the most serious complications of surgery, only a decade ago were being mistreated with resulting disaster for the patient. Today, understanding of the pathologic features has created a clear picture and rational treatment has replaced confusion. During and after the war pathologic studies by Bywater, Mallory, Lucké and others in patients dying after battle and crush injuries, supplemented by experimental and clinical observation by Trueta, Corcoran, Page, Thorn, and Van Slyke, have resulted in a more rational and successful approach.

The term "shock kidney" is probably more appropriate for clinical thinking since the newer concepts of shock have directed attention toward physiologic changes in systems other than urinary. This has resulted in the paradoxic conclusion that the treatment of shock kidney (synonyms: lower nephron nephrosis, pre-renal azotemia, hepato-renal syndrome, hemoglobinuric nephrosis, ischemia of renal cortex, crush syndrome, and anuria following intravascular hemolysis) is not to treat the kidney at all. If the pathologic changes in the kidneys are reversible, regeneration of renal cells will occur and survival is possible.

Today the management of this entity requires the cooperative effort of the surgeon, internist, and urologist. The latter must search for removable obstructive causes and abstain from proposing direct surgical attack on the kidney, such as decapsulation. He must be informed of the probable pathologic changes in the kidney, the related hepatic and cardiovascular abnormalities, and must support the internist in resisting pressure toward measures which may be harmful. Confronted by a case of anuria, the urologist should attempt to exclude any obstruction distal to the renal pelvis. Anuria occurring as a complication of urologic surgery, such as endoscopic prostatic resection, presupposes that such an investigation has preceded the surgery. This leaves the diagnosis of lower nephron nephrosis or shock kidney as self evident. When called as consultant, the problem for the urologist is more harassing, and instrumental examination may become necessary, since excretory urography is useless. If an obstructive cause is found for the anuria, surgery directed toward its removal is indicated. In the absence of such obstruction the care of the patient must be along the lines of newer thought and experience.

Having considered the extra-renal obstructive and general circulatory causes of anuria, in what intra-renal conditions may recovery be considered as possible or probable? Lower nephron nephrosis following mismatched blood transfusions, the crush syndrome, intra-vascular hemolysis and abortions, and the renal lesions following protracted shock, give some measure of hope for recovery. If the patient can be carried over the oliguric period recovery is possible in acute nephritis, even when it is protracted and accompanied by marked nitrogen retention. Toxic nephrosis, including poisoning from bichloride of mercury, carbon tetrachloride and phenol are often reversible. Anuria in a patient with malignant hypertension, bilateral cortical necrosis or the terminal phase of chronic glomerulonephritis and chronic pyelonephritis, usually terminates fatally.

To the urologist confronted by anuria following renal surgery, open or endoscopic prostatectomy, lower nephron nephrosis or shock kidney is almost invariably the cause.

* From the Department of Urology, Perth Amboy General Hospital. Read before the Section on Urology, The Medical Society of New Jersey, May 18, 1953.

In our experience, postoperative urinary suppression in general surgery is so closely associated with shock that lower nephron nephrosis or "shock kidney" is also the usual cause. We therefore feel that the remainder of this discussion can profitably be limited to a more detailed exposition of lower nephron nephrosis, characterized by oliguria and anuria, increasing azotemia and heme casts following prolonged circulatory depression.

PATHOLOGY

Typically, the affected kidney is large, smooth and pale. On sectioning, the cortex is pale and the medulla congested and striated. Microscopically the glomeruli are normal and necrosis of the walls of the distal convoluted tubules and ascending loop of Henle with heme casts in the tubules is the usual picture. Those findings may be superimposed on pre-existing renal lesions involving other elements of the kidney.

Autopsy findings also show liver damage, and it is believed that rapid deterioration of the patient in the shock state is caused by biochemical changes in the liver. According to Mallory, the lesions in the kidney occur between the third and fifth day and consist of necrosis and degeneration of the epithelium of the ascending loop of Henle and the distal convoluted tubules. When this process is at its height the tubules are unable to reabsorb selectively, and the glomerular filtrate rapidly reenters the blood stream. Formerly the accepted treatment was to force vast quantities of fluid in an attempt to "wash out" the tubular casts with the result that the circulation was overloaded and death often was caused by pulmonary edema or hepatic damage.

TREATMENT

The concept that the renal lesions are reversible and regeneration can occur as early as the fourth day has resulted in an entirely new treatment. Elimination of toxic or other deleterious substances, restoration of normal circulation, supportive measures to keep the patient alive until regeneration of kidney lesions occurs, are the current treatment. It is now believed that azotemia as the early cause of death is exaggerated. Retention of nitrogenous products for some months is not incompatible with some degree of normal activity. In the early stages, the dangers of oliguria and anuria are those of fluid retention, electrolyte imbalance and acidosis rather than poisoning by products of metabolism.

Modern treatment of postoperative urinary suppression can be considered under the following headings.

1. *Prevention* consists of maintaining blood pressure and averting loss of blood volume. Care must be taken not to overload the circulation rapidly and no more blood should be given than will replace the blood volume lost. It is possible to drown a patient with too much fluids. The prevention of intravascular hemolysis and hemoglobinemia during endoscopic prostatic resection is one specific measure in a procedure which seems to have a higher incidence of lower nephron nephrosis than other operations. Probably one-third of all deaths following endoscopic prostatic resection is due to oliguria and anuria.

2. *Maintenance of fluid balance.* In the presence of continued oliguria or anuria, only the insensible fluid loss should be replaced. This is about 1200 cc. per day. Fluids taken by mouth are preferable to infusions.

3. *Maintenance of electrolytic balance.* CO_2 combining power and sodium chloride content of blood must be carefully observed and regulated by diet and intravenous infusion. Potassium levels are also important.

4. *Treatment of the azotemia.* Moderate levels of azotemia should cause no alarm, since death is usually from cardiovascular or hepatic damage. Since it is difficult to say at which level azotemia becomes dangerous, methods to control azotemia become an even greater problem. Dialysis by the artificial kidney and peritoneal perfusion seem successful in clearing the blood of nitrogenous waste products, but technical difficulties have kept these procedures on an experimental basis. Tiding the patient over the critical period in cases of renal suppression until certain renal elements can regenerate and resume function may be accomplished at times by other more available methods. Gastric and duodenal lavage have been

used with favorable results. Dietary restrictions of protein and salt and substitution of a high carbohydrate, high fat diet will relieve some of the burden on the kidneys. Treatment is not directed at the kidney but rather toward keeping the patient alive. If the patient can be kept alive 8 days or longer recovery can occur.

CASE REPORTS

No. 1. A 67-year old white male, admitted to the hospital in June 1951, complained of difficulty in urination, nocturnal incontinence and nocturia of several months' duration.

Physical findings were negative except for a blood pressure of 190/110 and a grade 3 enlarged, compressible, boggy, non-tender prostate (benign). Blood count, urinalysis, blood chemistry studies, renal function tests, and excretory urogram were normal. Cystoscopy showed a moderately elongated and tortuous prostatic urethra with a median lobe of Albarran projecting intravesically to a moderate degree, plus grade 3 bilateral lateral lobe intra-urethral prostatic encroachment. Transurethral resection was carried out and thirty-five grams of tissue serially resected from the median and both lateral lobes. Moderate bleeding was encountered throughout the resection. At the termination of the procedure, return bladder flow was relatively free of active bleeding.

Several hours postoperatively the patient complained of severe suprapubic pain, and muscle rigidity of the lower abdomen was present. The bladder irrigations functioned unsatisfactorily and numerous blood clots continued to form in the bladder. The possibility of a perforation of the bladder was entertained and accordingly it was decided to perform an emergency suprapubic cystotomy. A small amount of extravasated bloody fluid was observed in the prevesical and perivesical spaces, which were drained at the time the suprapubic cystotomy was accomplished. Postoperatively the patient reacted poorly. Urinary output from the suprapubic catheter was very scanty the first few days postoperatively, averaging 100 cc. of amber, concentrated, blood-tinged urine daily. On the fourth postoperative day complete urinary suppression presented itself. The patient was semicomatose, disoriented and his temperature reached 105 degrees. Blood chemistry studies at this time showed the non-protein nitrogen to be 176 mg., urea 110 mg., and creatinine 8 mg. per hundred cc. Limitation of fluid to 1200 cc. daily was instituted during this phase, but the patient continued to fail and on the eighth postoperative day he expired.

This case presented a complete surgical urinary suppression caused by lower nephron nephrosis following transurethral prostatic surgery.

No. 2. A 76-year old white male was admitted to the hospital in acute urinary retention of two days' duration.

Physical examination showed a blood pressure of 146/90 and on rectal examination the prostate gland was three plus enlarged, soft, compressible, smooth, and non-tender and benign in character. All laboratory data and intravenous urography were negative.

The patient was placed on indwelling catheter drainage for 72 hours. Cystoscopy revealed a moderately elongated and tortuous prostatic urethra with marked elevation of the floor of the vesical neck from a hypertrophied median lobe with grade 3 bilateral lateral lobe intra-urethral encroachment. Transurethral resection was performed and forty grams of tissue resected. The indwelling Foley catheter was removed forty-eight hours postoperatively and the patient's general condition was satisfactory.

During the next twenty-four hours the patient passed small quantities of dark, concentrated urine. On the fourth postoperative day his urine output ceased completely and a Foley catheter was replaced in the bladder. Limitation of fluids orally to 1200 cc. daily was instituted. During the next nine days there was no urine output whatsoever and the blood chemistry on the eighth postoperative day showed the non-protein nitrogen to be elevated to 166 mg., urea nitrogen 90 mg. and creatinine 4.5 mg. per hundred cc. During this postoperative period the patient became progressively more lethargic with daily temperatures of between 103 and 104 degrees. On the ninth postoperative day the anuric phase was replaced by marked polyuria and during the next twenty-four hours 1860 cc. of a light, clear urine of low specific gravity were recovered. During the next ten days the patient's urinary output was copious and replacement of sodium and potassium was instituted along with a fluid intake of approximately 2500 cc. daily. At the end of three weeks the patient's blood chemistry had returned to normal and he was voiding adequate amounts of urine at regular intervals with minimal urinary complaints. On the twenty-fourth postoperative day the patient suddenly died of acute myocardial insufficiency on the basis of previous cardiac damage as shown by electrocardiographic studies.

This case presented an acute urinary suppression from lower nephron nephrosis after prostatic surgery. Return of renal function occurred following an anuric phase of nine days. Repeated cardiac complications starting some three weeks following surgery resulted in death.

No. 3. A 61-year old white male was admitted to the hospital in March 1950 complaining of progressive difficulty in urination with marked frequency and nocturia of six months' duration. An excretory urogram showed both kidneys to be functioning normally with no abnormal findings in the upper urinary tract. Cystoscopy revealed a hypertrophied prostate with a grade three bilateral lateral lobe intra-urethral encroachment and median lobe enlargement which projected intravesically to a

moderate degree. Transurethral prostatic resection was performed and 35 grams of tissue were resected from the median and both lateral lobes. The patient received penicillin and Sulfamerazine® postoperatively. After forty-eight hours the Foley catheter was removed and his general condition appeared satisfactory. During the next twenty-four hours the patient became oliguric and total urinary output for this period was 60 cc. of concentrated bloody urine. Blood chemistry on the fourth postoperative day revealed blood non-protein nitrogen 90 mg., urea nitrogen 54 and creatinine 2.8 mg. per hundred cc. The patient was cystoscoped on the fourth postoperative day and number 6 ureteral catheters were passed to both the right and left renal pelves without encountering obstruction and a rapid flow of blood tinged, concentrated urine at the rate of 120 drops per minute was observed from both catheters. The renal pelves were next lavaged with sterile water and the cystoscope was removed leaving the catheters in the renal pelves for drainage. The ureteral catheters were withdrawn on the following day and thereafter the patient's urinary output increased daily. He was discharged on the tenth postoperative day in satisfactory condition.

This case illustrates postsurgical urinary suppression following transurethral surgery from sulfonamide crystal deposits obstructing both ureters. Ureteral catheterization successfully corrected the urinary suppression and the patient thereafter made an uneventful recovery.

No. 4. A 54-year old white male had an abdominoperineal resection performed for an adenocarcinoma, grade three, of the rectosigmoid in May 1948. He progressed satisfactorily until January 1950, at which time he was re-admitted to the hospital with acute urinary retention. Intravenous urography revealed fairly good renal concentration of the dye and disclosed no abnormalities in the urinary tract. Blood chemistry was normal as were other routine laboratory procedures. Cystoscopy revealed a contracture of the vesical neck along with a median bar hypertrophy. Transurethral resection was performed and six grams of prostate tissue removed from the floor and both lateral aspects of the vesical neck. The patient made an uneventful convalescence and was discharged from the hospital eight days after surgery.

In July 1950, the patient presented himself complaining of not having voided for 72 hours. He was mentally confused and appeared semi-uremic. He was re-admitted to the hospital and blood chemistry studies showed a non-protein nitrogen of 175 mg., urea nitrogen of 110 mg., and creatinine of over 10 mg. per 100 cc. Cystoscopy was performed and the bladder mucosa appeared markedly injected and hyperemic with patchy areas of hemorrhagic cystitis and bullous edema throughout. Attemps to catherize the ureteral orifices with rigid number 5 ureteral catheters were unsuccessful.

The clinical impression was neoplastic disease originating in the rectosigmoid with peripheral extension to involve the base of the bladder and the lower ureters causing periureteral infiltration with bilateral obstruction of the lower ureters. The patient's uremia progressed and he succumbed several days following hospital admission.

No. 5. A 43-year old white female was operated upon on November 30, 1952, at which time a complete hysterectomy was performed for multiple fibroids of the uterus. Urologic consultation was requested on the second postoperative day because of complete urinary suppression from the time of surgery. Blood chemistry studies showed moderate azotemia and the patient's face and ankles were edematous. Emergency cystoscopy was carried out on the second postoperative day and ureteral catheterization of both the right and left ureters revealed complete impassable obstruction four centimeters above the ureteral openings bilaterally. A diagnosis of surgical urinary suppression from bilateral obstruction of both lower ureters following gynecologic surgery, probably the result of ligating both lower ureters, was entertained. Bilateral nephrostomy was immediately carried out and both kidneys thereafter secreted large amounts of urine through the nephrostomy tubes. Postoperatively the patient progressed satisfactorily with adequate urinary output and normal blood chemistry. On the sixteenth postoperative day cystoscopy was again performed, and following repeated manipulations number 6 ureteral catheters were successfully passed through the lower strictured ends of both ureters to the right and left renal pelves. The ureteral catheters were allowed to remain in place for 48 hours. Following their removal the nephrostomy tubes were clamped and the patient subsequently began to void adequate amounts of urine at frequent intervals. The nephrostomy tubes were then removed and the patient was discharged from the hospital on the twenty-third postoperative day in satisfactory condition.

She was re-admitted to the hospital two weeks later at which time cystoscopy was once again performed and both lower ureters successfully dilated with number 6 catheters. She was discharged from the hospital three days later in good condition.

This case presents an acute surgical urinary suppression following complete hysterectomy from suture ligatures obstructing both lower ureters, necessitating bilateral nephrostomy drainage and subsequent ureteral catheterization.

No. 6. A 46-year old white female was operated on in July 1952 at which time a total hysterectomy and left salpingo-oöphorectomy were performed for multiple fibromyomata of the uterus. The urologist was consulted on the sixth postoperative day because of complete urinary suppression of 5 days' duration. Laboratory studies at that time showed a non-protein nitrogen of 195 mg., urea nitrogen 112 mg., creatinine 8.2 mg., and a CO_2 combining power of 41 volumes per cent.

The patient's postoperative course was marked

by persistent vomiting with temperature elevations to 106 degrees and complete urinary suppression. The clinical findings were suggestive of lower nephron nephrosis with hepato-renal syndrome. No blood transfusions had been instituted during the patient's entire postoperative course. She succumbed on the eighth postoperative day and an autopsy was performed. The kidneys were grossly enlarged, tense, and the capsules stripped with ease. Cut sections revealed a fairly normal relation between the cortex and medulla. The parenchyma appeared semi-translucent and edematous. Both ureters were traced down to the bladder and were found to be grossly unimpaired. Microscopic examination showed findings of acute glomerulonephritis along with nephrotic changes in the lower nephron.

This case presented the clinical and pathologic findings of lower nephron nephrosis secondary to gynecologic surgery that terminated in death eight days following surgery, superimposed on acute glomerulonephritis.

No. 7. A 36-year old white female, was operated upon in October 1951, at which time a cholecystectomy was performed for chronic cholecystitis and cholelithiasis. A transfusion of 500 cc. of whole blood had been given immediately after operation. The urologist was consulted on the fourth postoperative day because of complete urinary suppression of 48 hours' duration. At that time the patient was lethargic and could only be aroused following marked stimulation. White blood count was 16,000, with 89% neutrophiles and 11% lymphocytes. The non-protein nitrogen was 200 mg., urea nitrogen 120.5 mg., and creatinine 8.7 mg. per hundred cc.

A clinical impression of lower nephron nephrosis from a transfusion reaction was made, and it was decided to transfer the patient to another hospital for treatment with the artificial kidney. This was accomplished and although the patient received 2 treatments with the dialyzing kidney, uremia progressed and she died on the eighth postoperative day.

Postmortem studies of the kidneys, both grossly and microscopically, indicated a lower nephron nephrosis.

No. 8. A 29-year old male was admitted to the hospital with a history of severe pain over the left costovertebral area, vertigo, nausea, and hematuria of three days' duration. For 24 hours prior to hospital admission he had not passed any urine and on examination he appeared acutely ill. At the age of 15 a right nephrectomy had been performed, following an automobile accident in which the patient's right kidney was severely lacerated. X-ray of the abdomen revealed no opaque calculi present. Laboratory studies were negative with the exception of a moderate azotemia. Cystoscopy was performed on the day of hospital admission under spinal anesthesia, and the left ureteral orifice was observed to be markedly congested and edematous. A small calculus was observed in the intra-mural portion of the left ureter partially protruding through the ureteral orifice into the bladder. Following manipulation with an ureteral catheter, the calculus was forced out of the ureter into the bladder and subsequently removed through the cystoscope. A ureteral catheter was next passed up the left ureter to the pelvis without encountering obstruction and a drip of clear urine at the rate of 120 drops per minute was observed to flow from the opening of the catheter. The patient thereafter made an uneventful recovery.

This case presented the findings of acute urinary suppression from a small calculus obstructing the left lower ureter in a solitary kidney. Following cystoscopic removal of the calculus from the left ureteral orifice, the patient recovered completely.

SUMMARY

Three cases of surgical urinary suppression following endoscopic prostatic resection with two deaths and one recovery seem to indicate that lower nephron nephrosis increases as the resectionist becomes bolder and resects larger and more vascular prostates. One of us has been performing resections since 1932, but anuria was not seen until recent years when much more extensive resections have been carried out.

Of the other cases, one was referred by the general surgeon and two by the gynecologist. One case of oliguria and anuria occurred six months following endoscopic resection of the prostate for urinary retention several years after an abdominoperineal resection of the rectosigmoid for carcinoma. Finally a case of calculus anuria in a solitary kidney is presented. Four of the cases of urinary suppression were obstructive in nature although the clinical picture of lower nephron nephrosis was closely simulated.

254 State Street

CAROTID SINUS SYNDROME*

John G. Rogers, M.D., Riverton, N. J.

Recent experience with eight cases of this cardiovascular syndrome is described, with a description of the physiologic pathology, clinical picture, and management.

Intermittent loss of consciousness due to a hyperactive carotid sinus reflex is a cause of inconvenience, concern, and disability to many persons. Recent experiences with patients suffering from this syndrome suggest that it is more common than generally realized, since most of these patients had already been studied elsewhere without a definite diagnosis having been made.

ANATOMY AND PHYSIOLOGY

The carotid sinus is an enlargement of the carotid artery at its bifurcation. In contact with this is the carotid body which has the appearance of a gland containing thin-walled sinusoidal vessels. Pressure-sensitive afferent fibers of the glossopharyngeal nerve carry impulses from the carotid body to the vasomotor and cardio-inhibitory centers in the reticular formation of the medulla. From here impulses are transmitted via the vagus nerve to the heart where any degree of depression of the sino-auricular node or of auriculo-ventricular conduction may occur. This type of reaction is the most common of the abnormal responses to carotid pressure and is listed as type 1 under "clinical picture" below. Such effects may be blocked therapeutically with atropine; ephedrine, by direct stimulation of cardiac tissue, helps overcome the depressing vagal effect.

Efferent impulses from the vasomotor center may also cause vasodilation with hypotension giving rise to the type 2 response discussed below. These vasomotor reflexes, in contrast to the cardiac reflex, are apparently mediated via the sympathetic nervous system since they are abolished experimentally by sympathectomy.[1] Ephedrine may help in the treatment of symptoms due to this situation by causing vasoconstriction, whereas atropine is of no benefit.[2] Other less well established reflex areas are probably responsible for the third type of reaction produced by alterations in cerebral circulation.[3]

CLINICAL PICTURE

A variety of symptoms is found in patients with this instability of the neuroregulation of the circulatory system. Among the more common are "lightheadedness," syncope, convulsions, true vertigo, episodes of weakness and tinnitus. The circumstances under which the attacks develop are also important. In typical cases the attacks will be precipitated by any activity in which pressure is exerted upon the area of the carotid sinus. Thus, the wearing of stiff collars, sudden turning of the head, straining at stool, shaving, or even coughing may be the trigger mechanism. After the patient has suffered from this distressing syndrome for a period of time, has been given various explanations for his symptoms and various ineffective treatments, it is quite understandable that an anxiety state should be superimposed on the organic complex. Before the correct diagnosis had been established, some of our patients were told that they had brain tumors, "strokes," central nervous system syphilis, epilepsy, heart disease, neurasthenia and psychoneurosis. Conversely, it is well known that this syndrome is more likely to develop in patients whose vasomotor system and psychologic equilibrium are in a state of precarious balance so that it is frequently difficult to distinguish between those symptoms which are due to the actual carotid sinus reflex and those which represent a more generalized neurocirculatory instability. It is surprising, however, how many of the so-called psycho-

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neurotic symptoms disappear if effective therapy directed toward the specific cause can be instituted.

Three types of abnormal response to carotid sinus pressure can be elicited. They may occur singly or in combination in the same patient:

1. Marked bradycardia, heart block or sinus arrest.
2. Marked hypotension.
3. Direct cerebral effect with unconsciousness and convulsions even in the absence of bradycardia or hypotension.

DIAGNOSIS

Unlike the patient with hysterical fainting, these patients lose consciousness suddenly, without warning, and frequently injure themselves in falling. If the incident occurs while driving a car or while in some other hazardous situation, serious results may occur. The episodes can usually be differentiated from true epilepsy by the absence of aura, incontinence, postconvulsive fever, and headache. The duration of the loss of consciousness is usually much briefer than in an epileptic seizure but this is variable.

Physical examination is likely to be unrevealing. However, the reproduction of the patient's symptoms by pressure upon the carotid sinus plus marked hypotension or bradycardia under this stimulation establishes the diagnosis.

With the patient reclining the most distal point of carotid artery pulsation is located. The examining thumb is then placed on the carotid sinus with the fingers behind the neck. While listening to the heart, the carotid sinus is compressed against the spine. As soon as cardiac arrest, marked bradycardia or symptoms of cerebral anoxia develop, pressure should be released. Although the right carotid sinus is the more frequent cause of symptoms, the left may be guilty in some cases. Both sides should be tried separately. We do not recommend simultaneous compression of the carotid sinuses. Some cases of this syndrome may be associated with actual tumefaction about the carotid body and in these cases the tumor will be palpable. Occasionally the carotid sinus may be stimulated by an abnormally long styloid process and x-ray studies of the area will reveal this abnormality.

TREATMENT

Treatment is designed to eliminate those mechanical factors which are excessively stimulating the carotid sinus and to reduce the sensitivity to stimulation. The first is accomplished by recommending loose collars and the avoidance of any strain to the neck muscles. The second is accomplished by the use of autonomic drugs. For this purpose atropine sulfate in doses of 0.4 - 0.6 mg. (gr. 1/150 - 1/100) four times daily by mouth will usually suffice. If the patient is elderly one should check the intraocular tension before using atropine in order to avoid the precipitation of an attack of acute glaucoma. The synergistic action of ephedrine sulfate (25 mg. four times daily) is sometimes helpful. If symptoms persist in spite of the medication, and if they are of sufficient severity to warrant it, surgical denervation of the carotid sinus should be considered. This is done by stripping the adventitia from the carotid vessel in and about the area of the bifurcation. The patient should be prepared preoperatively with large doses of atropine in order that an acute attack of syncope may not be precipitated during surgical manipulation of the carotid body. For this purpose a dose of atropine sulfate 0.4 mg. (gr. 1/150) hypodermically should suffice. Local infiltration of the area with procaine during the surgical manipulation may be of some assistance. If both carotid bodies are excessively sensitive, the more active side should be denervated first and an attempt made to control any residual symptoms medically. If symptoms are severe or some local disturbance in the neck prevents denervation of the carotid sinus, actual intracranial section of the glossopharyngeal nerve root may be necessary.

The predominance of this syndrome in men may be related to their wearing tight collars. Two cases in women were encountered but are not reported because electrocardiograms showing asystole were not obtained.

CASE REPORTS

No. 1. This 56-year old male developed left anterior chest pain associated with weakness and sweating while sitting and viewing a deceased relative. On attempting to rise he fainted. He was given an injection by a physician and sent to the

hospital with a diagnosis of myocardial infarction. The past history revealed nothing of note except previous similar episodes, diagnosed as angina pectoris. Positive physical findings included grade 2 retinal arteriolar sclerosis, moderate obesity and cold clammy hands and feet. Admission laboratory work was normal. Nothing could be found to substantiate the diagnosis of myocardial infarction. The electrocardiogram was normal before and after exercise. Periods of asystole (See Figure 1.—I.) lasting up to six seconds and associated with a feeling of faintness could be produced by pressure on the left carotid sinus; there was no response to pressure on the right. By avoiding tight collars and understanding the mechanism involved, he has remained free of "anginal" and syncopal attacks.

No. 2. This 65-year old white male was admitted because of an episode of giddiness and syncope preceded by marked pallor, sweating, and generalized weakness. He had had four previous similar episodes since 1906, some of which had led to hospitalization but without any cause being found. For years he had noted giddiness on merely looking upward at a map on the wall and wore tight collars. Attempts to demonstrate carotid sinus hyperactivity on a previous admission had been unsuccessful. The patient suffered with moderately severe diabetes mellitus, hypertensive cardiovascular disease, mild chronic glomerulonephritis, a chronic bleeding duodenal ulcer which had required gastrectomy, and mild prostatism. Positive physical findings included pulse, 70; respiration, 20; blood pressure, 190 100, good general appearance, grade 3 hypertensive and diabetic retinopathy, mild cardiac enlargement, a loud mitral systolic murmur, generalized arteriosclerosis, and symmetrical prostatic enlargement. Pertinent laboratory findings included hemoglobin 11.0 Gm., blood sugar 145, and blood urea nitrogen 15 milligrams per hundred cc. Periods of cardiac arrest associated with a feeling of lightheadedness could be produced by pressure on either carotid sinus. The wearing of loose collars and explanation of the mechanism eliminated further attacks.

This case is interesting because his syncope had been attributed to other entities but repeated efforts to demonstrate carotid sinus hyperactivity finally established the cause.

No. 3. This 46-year old white male was admitted on the surgical service because of right sided abdominal pain associated with tenderness. This subsided spontaneously. He gave a three year history of frequent episodes of syncope preceded by weakness, sweating, vertigo, and blurred vision coming on when he suddenly turned his head. On several occasions he had injured himself during the episodes. He also complained of typical angina pectoris and following one of his syncopal attacks experienced prolonged precordial chest pain radiating to the left arm and associated with weakness and sweating. Serial electrocardiograms following this had been diagnostic of myocardial infarction and the patient was treated as such. The unexplained syncopal attacks had become so incapacitating that the patient lost confidence in himself and was unable to

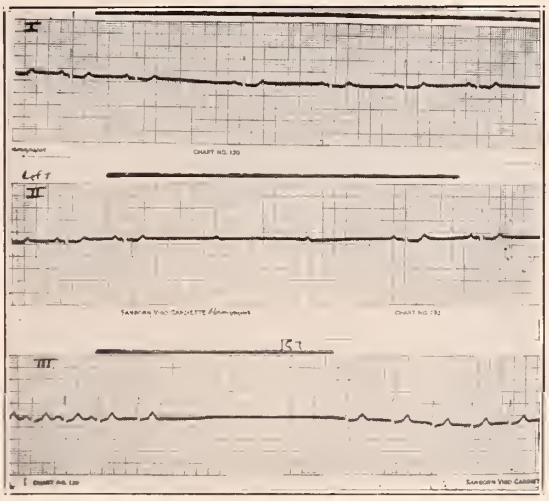


Figure 1. Electrocardiographic Recordings of the Response to Carotid Sinus Pressure.

The solid dark line at the top of each tracing indicates the duration of pressure.

I. Sinus bradycardia: Case 1.
II. Sinus bradycardia and auriculo-ventricular heart block: Case 4.
III. Cardiac standstill followed by transient nodal rhythm: Case 5.

work or leave his house. With this he developed increasingly severe nervousness and symptoms compatible with an irritable colon which finally precipitated his admission to the hospital. Physical examination showed a remarkably tense man with fluttering eyelids, cold sweaty hands and feet, and no other abnormality except the production of "lightheadedness" and asystole by pressure on either carotid sinus. The electrocardiogram showed a probable healed anterior myocardial infarction; a Master's two step test produced an episode of angina as well as abnormal alterations of the electrocardiogram. The gallbladder, stomach, duodenum, and colon were normal by roentgen examination except for irritability of the colon. Despite explanation, avoidance of neck pressure, and doses of ephedrine, Banthine,® and atropine pushed to the point of unbearable side reactions he was still incapacitated. A two stage bilateral denervation was therefore performed. Postoperatively no hyperactivity of the carotid sinus could be demonstrated. Incidentally, the nervousness and irritable colon improved markedly.

This case illustrates the development of severe neurotic symptoms secondary to an unassociated, undiagnosed organic illness.

No. 4. This 62-year old white male was seen in the clinic because of "heart attacks" of three years' duration plus anorexia, nausea, vomiting, and weight loss for two months. The "heart attacks" consisted of episodes of precordial pain, vertigo, tinnitus, and fainting; some episodes had been precipitated by effort and others by shaving. Physical examination indicated evidence of recent

weight loss, mild retinal arteriolar sclerosis, rather marked kyphotic deformity of the chest with pulmonary emphysema, and moderate generalized arteriosclerosis. Routine laboratory work, chest and upper gastrointestinal x-rays, and one electrocardiogram were not remarkable. Pressure on the left carotid sinus produced a significant period of cardiac arrest (Figure 1—II) and the subjective symptoms of which the patient complained. Treatment consisted of explanation, wearing a loose collar, and atropine 0.6 mg. four times a day. Six months later he had returned to work, regained his lost weight, and had had no further syncopal attacks nor gastrointestinal disturbances.

No. 5. This 52-year old white male was seen because of incapacitating episodes of dizziness and fainting. These were sometimes associated with true vertigo, nausea, epigastric distress, and belching but never any tinnitus. Physical examination was normal, as were routine laboratory studies, electrocardiograms, skull x-rays, and the cerebrospinal fluid. An otolaryngologist detected some hearing loss and sluggish vestibular response and made a diagnosis of Menière's disease. However, pressure over either carotid sinus caused significant periods of cardiac arrest (Figure 1.—III) during which the patient's symptoms were reproduced. He was therefore treated with explanation, avoidance of neck pressure, and atropine. Two months later he was well, working, and free of gastrointestinal and syncopal complaints.

No. 6. This patient was referred to the hospital for an electrocardiogram because of repeated episodes of syncope. No evidence of any organic cardiovascular disease could be found. On pressure over the carotid sinus complete cardiac standstill and lightheadedness were produced. Conversation with the referring physician seven months later revealed that the patient was symptom free on treatment similar to case number 5.

No. 7. This patient was referred to the hospital because of possible angina pectoris. No evidence could be found to support this impression. Since he was a tense, hyperactive individual with cold moist palms and bradycardia, carotid pressure was applied as a matter of interest. "Lightheadedness" and asystole were produced. It was not concluded that any of the patient's complaints were attributable to this finding but rather that it was a reflection of his generalized state of autonomic imbalance with exaggerated vagal activity.

No. 8. This 57-year old white male was seen in the medical clinic complaining of episodes of unconsciousness of twelve years' duration. On a previous hospital admission here and in a neighboring neurologic center he had been diagnosed "cerebral arteriosclerosis with probable infarction into a silent area." Brain tumor, syphilis, hysteria, and other unpleasant conditions had been suggested. The patient admitted being basically "high strung" but had become a "nervous wreck" because of the incapacitating episodes of syncope. His attacks were usually precipitated by coughing, straining, or sneezing. He had many chronic unassociated complaints. Physical examination showed a left lower facial tic and slight weakness in the same area. There was ecchymosis around the left eye from a recent fall during an attack. Aside from marked objective tenseness and hyperactive reflexes there were no other positive findings. Complete blood count, urine, lumbar puncture, serology, electrocardiogram, and skull x-rays were noncontributory. Periods of asystole up to eight seconds could be produced by pressure on either carotid sinus. An electroencephalogram done elsewhere was said to be abnormal. The patient was advised to avoid pressure on the neck, sudden motion of the head, straining, constipation, and atropine 0.6 mg. four times a day was prescribed. When seen eight months later he had suffered no further episodes of syncope and had been able to return to a gainful occupation.

The weakness of the left lower face and abnormal electroencephalogram are suggestive of a cerebrovascular "accident" caused by stasis and anoxia during an episode of asystole, possibly exaggerated by pre-existing cerebral arteriosclerosis.

SUMMARY

Eight cases of hyperactive carotid sinus reflex have been presented. The anatomy, physiology, clinical picture, diagnosis, and treatment are discussed. The incapacity caused by the disease as well as the possible complications such as "psychoneurosis," injury from falling, and brain and heart damage from anoxia are emphasized. The importance of an adequate history and the simplicity of making the diagnosis are stressed.

Appreciation is expressed to Dr. Perry S. MacNeal, chief of medicine and Dr. T. J. McMillan, chief of cardiology, for guidance and material used in this article.

907 Thomas Avenue

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ANNOUNCEMENTS

ATTENTION VASCULAR SURGEONS

It has been suggested by a number of our members that vascular surgery and vascular surgeons might be well served by the establishment of a New Jersey Society on Vascular Surgery.

Those responsible for the suggestion would like to have some expression of the interest and reaction of qualified members of the State Society. Accordingly, request is hereby made that suggestions and opinions regarding this proposal be addressed to the Executive Offices of The Medical Society of New Jersey, 315 West State Street, Trenton 8, New Jersey. Further action on the matter will depend upon the response.

CARDIOLOGY MEETINGS

The New York Society for Circulatory Diseases, an affiliate of the American College of Cardiology, has scheduled four scientific sessions for the coming year. These meetings will be held in Room 440 at the New York Academy of Medicine, 2 East 103 Street, New York City at 8:30 p.m. on October 13, December 8, 1953; February 9 and April 13, 1954.

DIABETES SYMPOSIUM

A symposium on diabetes will be held at the Academy of Medicine in Newark on October 21 from 2:00 to 5:00 p.m.

The meeting will consist of two parts, the first of which comprises a series of talks by leading specialists in diabetes and metabolic diseases. The second part will be a panel discussion by the same speakers, among whom are Doctors Francis Lukens, Garfield Duncan, Thomas McGavack, and Herbert Pollack.

CRIPPLED CHILDREN SOCIETY

The National Society for Crippled Children and Adults announces its annual convention to be held at the Palmer House, Chicago, November 12-14. The program will include general sessions, seminars, exhibits, demonstrations, workshops, and other features. Among the speakers will be Doctors Edward J. McCormick, Francis R. Horwich, William T. Sanger, and Henry H. Kessler.

AMERICAN TRUDEAU SOCIETY MEETING

The Eastern Section of the American Trudeau Society announces that it will hold its 1953 meeting in Portland, Maine, October 23-24. Scientific sessions will be held at the Eastland Hotel and will include the following topics; chemotherapy of tuberculosis; recent advances in the treatment of pulmonary emphysema; a comparison of results of thoracoplasty and resection in tuberculosis; the surgical treatment of mitral insufficiency; and other allied subjects.

MENTAL HEALTH LECTURES

The A. Walter Suiter Lectureship will present two speakers at the New York Academy of Medicine on Thursday, November 5 at 8:30 p.m. Doctors John C. Whitehorn and Frederick C. Redlich will discuss current topics concerning mental health.

MILITARY SURGEONS MEETING

The Association of Military Surgeons will holds its annual convention in Washington, D. C., November 9-11. Medical reserve officers will be granted one training credit point for each day's attendance.

SURGICAL ESSAY AWARD

The New Jersey Chapter of the American College of Surgeons announces an annual prize of $100 to be awarded to the surgical resident in a New Jersey hospital who submits the best published paper on a surgical subject. An additional annual prize of $100 will be given to a New Jersey intern who presents the best unpublished paper, also on a surgical topic. Further information may be obtained from the Chapter's secretary, Dr. Benjamin Daversa, 209 Passaic Avenue, Spring Lake, N. J.

NEW OFFICERS

At the annual meeting of the New Jersey Society of Physical Medicine and Rehabilitation held in Atlantic City on May 20, the following officers were elected: President-Treasurer, Dr. Bertram M. Bernstein, Trenton; Vice-President, Dr. Fulton Massengill, Newark; Secretary, Dr. Bror S. Troedsson, 188 South Essex Street, Orange.

STATE ACTIVITIES

TRUSTEES' MEETINGS

May 17, 1953

(Minutes Approved July 26, 1953)

A regular meeting of the Board of Trustees was held on Sunday, May 17, 1953, at Haddon Hall, Atlantic City. The greater part of the meeting was given over to the consideration of resolutions and items of business submitted for referral to the House of Delegates and subsequently reported in the Official Transactions.

The Board approved a motion authorizing that a letter be sent to the Cereal Institute expressing congratulations on the publication of the Better Breakfast Week booklet.

Formal acknowledgment of the appreciation of the Board for the outstanding contribution made by Dr. Harrold A. Murray to the welfare of the Society and the people of the state during his term as president of the State Society was made; a standing vote of commendation and thanks was unanimously tendered.

May 20, 1953

(Minutes Approved July 26, 1953)

The reorganization meeting of the Board of Trustees was held at noon on Wednesday, May 20, 1953, at Haddon Hall, Atlantic City. The following is a summary of the principal actions taken by the Board at this meeting:

Dr. Reuben L. Sharp was unanimously re-elected as chairman of the Board. Dr. C. Byron Blaisdell was unanimously re-elected as secretary of the Board.

A motion was unanimously adopted whereby the Executive Officer, Administrative Secretary, Executive Secretary of the Subcommittee on Legislation, Assistant Editor of The Journal, and the Medical Director for the Distribution of Medical Care, and the general staff of the Executive Offices were reemployed at the salaries provided in the 1953-54 budget.

Dr. Rowland D. Goodman, 2d, who for the preceding seven months had served as acting editor of The Journal was by unanimous action appointed editor of The Journal for 1953-54.

Dr. David B. Allman was unanimously re-elected as a Board member of the Finance and Budget Committee.

The Board adopted a motion authorizing the Special Committee on the Medical School of the Medical Society to study the entire problem of the proposed medical-dental school and directing that all policy relating to the medical school should be referred to the Board of Trustees, and that after action by the Board the Special Committee on the Medical School should carry out the policies approved by the Board.

A motion providing that the members of the Medical-Dental Liaison Committee be members of the Board of Trustees, and directing that the president communicate with the president of the Dental Society requesting that the Dental Society give the same representation, was approved.

A motion was adopted that in the event of an emergency the A.M.A. delegates of the Medical Society be authorized to delegate an alternate-delegate, and to inform the Executive Offices of such action in order that official notification of such designation may then be made to the A.M.A.

SUPPORT YOUR COMMUNITY CHEST!

NEW JERSEY STATE DEPARTMENT OF HEALTH

PUBLIC HEALTH NEWS FOR THE PHYSICIAN

CARDIOVASCULAR DISEASE INSTITUTES FOR NURSES

More than two hundred nurses attended five-day institutes in cardiovascular disease control in four areas of New Jersey (Newark, Camden, Trenton and Paterson) during the past year. These institutes, arranged through joint planning of the New Jersey State Department of Health, St. Michael's Hospital of Newark, medical, nursing and allied professional health and welfare organizations, offered speakers, films and demonstrations to interpret new developments in research, diagnosis and treatment.

Nurses who have attended these institutes have shown interest in helping to promote local action for reducing the heavy toll of death and incapacitation from heart disease.

It is expected that these nurses will be active in planning for and participating in regional conferences and in-service programs so that the material offered at the area institutes may be extended to all nurses in the state.

Assistance in planning these local conferences and programs is available at all times upon request. Inquiries should be addressed to Miss Laura Robinson, R. N., Chairman, Planning Committee, Cardiovascular Disease Institute for Nurses, Muhlenberg Hospital, Plainfield, New Jersey.

OBITUARIES

DR. WILLIAM BEYER

Dr. William Beyer of Edgewater died on August 20 at the age of 53.

Dr. Beyer was born in Brooklyn, and was a graduate of New York Medical School, class of 1927. He interned at Flower-Fifth Avenue Hospital in New York City and was a member of its staff and the staff of Holy Name Hospital, Teaneck.

Dr. Beyer was a veteran of World War II, serving as a colonel in the Medical Corps. He was active in civic affairs and was a member of the Edgewater Board of Health.

DR. VICTOR E. BULLEN, SR.

Dr. Victor E. Bullen, Sr., died at the age of 84 on June 29 in Paramus.

Dr. Bullen came to the United States from England at the age of 18 and after working for six years in a silk mill, enrolled in New York University Medical School. Following his graduation in 1898 Dr. Bullen practiced in Paterson for the ensuing fifty years.

In addition to practicing medicine he was active in civic affairs and was a leader in the silk industry in and around Paterson.

DR. PHILIP S. BUSICCO

Dr. Philip S. Busicco of Englewood died on August 18 in Miami, Florida at the age of 52.

Dr. Busicco was a graduate of New York University Medical School, class of 1925, and was a fellow of the American College of Surgeons and the International College of Surgeons. He was an attending surgeon and gastroscopist at the Englewood Hospital and a member of the Society of Surgeons of New Jersey.

DR. WILLIAM A. CHESNER

Dr. William A. Chesner died at the age of 47 on August 27 at his home in Trenton.

Dr. Chesner was graduated from Georgetown University Medical School in 1931 and interned at St. Francis Hospital, Trenton. He was an associate surgeon on the staff of that hospital and a fellow of the American College of Surgeons.

Dr. Chesner was active in civic and religious affairs of his community.

DR. MATTHEW K. ELMER

Dr. Matthew K. Elmer of Bridgeton died on August 12 at the age of 93.

Dr. Elmer was a graduate of the University of Pennsylvania Medical School, class of 1885, and interned at St. Mary's Hospital, Philadelphia. He practiced in Bridgeton from 1886 until 1935. He served as city physician for Bridgeton, and was a member of the surgical staff at Bridgeton Hospital and of the Philadelphia Medical Club. Dr. Elmer was a director of the Cumberland National Bank for 36 years, and was an emeritus member of the Cumberland County Medical Society.

Dr. Elmer was the last of an unbroken line of

Bridgeton physicians of the same name that went back 185 years. One of his ancestors, Dr. Jonathan Elmer, was a member of the First Continental Congress and the first United States Senator from New Jersey.

DR. HERBERT W. FOSTER

Dr. Herbert W. Foster died at his home in Montclair on July 13 at the age of 83.

Dr. Foster was graduated from New York Medical College—Flower-Fifth Avenue Hospital in 1891. He served an internship in that hospital from 1891 to 1892 and at Hahnemann Hospital in Philadelphia, 1892-93. He was on the staff of Post Graduate Hospital, New York City from 1900 to 1910. In 1893 he opened his practice in Montclair where he served as attending physician of Mountainside Hospital until 1934. He was also on the staff of Montclair Community Hospital.

Dr. Foster was a member of the New Jersey Medical Club, the American Institute of Homeopathy, the New Jersey State and Essex County Homeopathic Societies, and was founder and first president of the Associated Physicians of Montclair and Vicinity.

DR. ALICE S. GIBB

Dr. Alice S. Gibb of Elizabeth, wife of Dr. Henri E. Abel, died in New York City on August 3 at the age of 56.

Dr. Gibb was graduated from Cornell University Medical College in 1925, and interned at Bellevue Hospital. She was a member of the staff of the Elizabeth General Hospital and of the American Academy of Allergy. She had also been a member of the boards of the Family and Children's Society and the Visiting Nurse Association.

DR. MAX KUMMEL

Dr. Max Kummel of Newark, died on August 30.

Dr. Kummel was born in Poland in 1890. He was graduated from Long Island University School of Medicine in 1916 and received a law degree from the New Jersey Law School in 1926. He served in World War I as a lieutenant in the Army Medical Corps and in World War II with the Public Health Service. He was a member of the staffs of Beth Israel and West Hudson Hospitals. Dr. Kummel held membership in the National Association of Military Surgeons and was a founder of American Legion Post 46 of East Newark.

DR. ARCANGELO LIVA

Dr. Arcangelo Liva, past president of the State Board of Medical Examiners and of the Bergen County Medical Society, died in Los Angeles, California on August 13 at the age of 66.

Dr. Liva was a graduate of Eclectic Medical College in New York City, class of 1912. He was also a graduate of the University of Rome, Italy, Faculty of Medicine and Surgery in 1935.

Dr. Liva practiced ophthalmology and otolaryngology. He was a fellow of the American College of Surgeons, International College of Surgeons and a member of the American Academy of Ophthalmology and Otolaryngology. He was an instructor in bronchoscopy at the Post Graduate Hospital in New York City, and professor and surgeon at the New York Ophthalmic Hospital. He was chief of the eye, nose and throat department of the Hackensack General Hospital and was on the staffs of the Eye and Ear Infirmary and Presbyterian Hospital in New York. Dr. Liva was also a diplomate of the American Boards of Ophthalmology and Otolaryngology. He was an emeritus member of the Bergen County Medical Society.

DR. SOLOMON I. LURIE

Dr. Solomon I. Lurie died on September 7 in Long Beach, L. I., at the age of 57.

Dr. Lurie was graduated from Illinois Medical School in 1921 and began practicing in Newark soon afterwards. He was on the staff at Beth Israel Hospital, and was an examining physician for Newark draft boards during World War II.

DR. BERIDGE ROBERTSON

Dr. Beridge Robertson of Demarest died on September 7 at the age of 36.

Dr. Robertson was born in Godalming, Surrey, England, and was a graduate of the College of Physicians and Surgeons, Columbia University. She served her internship at Babies Hospital in New York and her residency at Gallinger Hospital in Washington, D. C. She was assistant pediatrician at the Vanderbilt Clinic.

DR. HENRY G. SMITH

Dr. Henry G. Smith, former resident physician at Overbrook Hospital, Cedar Grove, died at his home on August 3.

Dr. Smith was born in Rome, Georgia, in 1888 and was graduated from the University of Tennessee Medical School in 1909. He interned at New York Lying-In Hospital, Passaic General Hospital, and the Willard Parker Hospital for Contagious Diseases. He was a major in World War I.

Dr. Smith was a member of the New Jersey Neuro-Psychiatric Association and the New York Society for Clinical Psychiatry. He was an honorary member of the American Psychiatric Association and a diplomate of the American Board of Psychiatry and Neurology.

Dr. Smith was associated with Overbrook Hospital for 42 years. He was also interested in antiques and was past president of the Antique Club of New Jersey. He had a collection of more than 500 pieces of rare glass specimens in his home. He was also active in civic and fraternal affairs in his community.

DR. GORDON G. WALTON

Dr. Gordon G. Walton died in Paterson on August 4 at the age of 74.

Dr. Walton was assistant city physician for Paterson and former coroner of Passaic County. He was a graduate of New York University Medical School, class of 1904. He was consulting physician in the department of medicine at Paterson General Hospital, and was health officer for West Paterson and Totowa Borough. He was active in many fraternal affairs of Paterson.

COUNTY SOCIETY REPORTS

ATLANTIC

Leonard B. Erber, M.D., Reporter

A regular meeting of the *Medical Society of Atlantic County* was held at the Traymore Hotel, May 8, Dr. R. D. Harley presiding.

Dr. Timberlake, reporting for the Legislative Committee, surveyed the work that is being done at a state level in the legislative field. He briefly commented on the important bills and activities of current concern to the profession.

Dr. Gleason announced a new enrollment period for the Blue Cross Hospitalization Plan. In reference to the libel and slander liability policy which the society had previously carried, information had been received from the state society that the Employers Reinsurance Corporation has agreed to write the insurance. After some discussion relative to what extent the society should be covered, a motion by Dr. Allman that the Insurance Committee be empowered to purchase such a policy to cover the officers of the society and the *Bulletin* was approved.

Dr. Holland reported that 1100 emergency medical cases had been handled in the fiscal year ending April 30, 1953.

Dr. Diskan, reporting for the Conservation of Vision Committee, stated that P.T.A.'s had been invited to accept guest speakers, and that the state conservation of vision program was under way.

The following officers were elected for the coming year:

President: Dr. E. Harrison Nickman; Vice-President: Dr. Matthew Molitch; Secretary: Dr. Louis Rosenberg; Treasurer: Dr. Jay E. Mishler.

The dues for the coming year were fixed at $10.00 above the state assessment. Statements will be itemized and include the A.M.A. dues of $25.00.

A special meeting of the executive committee of the *Medical Society of Atlantic County* was held on May 21, at the home of the president, Dr. E. Harrison Nickman.

The purpose of the meeting was to discuss policy for the coming year. It was suggested and agreed upon that the committees should follow the state pattern as follows: welfare, legislative, public health, medical practice and public relations. It was further suggested that the names of men interested in work at a state level be sent to Dr. Decker, President of the State Society.

Dr. Molitch, chairman of the program committee, presented for discussion and recommendations an elaborate plan for a diversified series of meetings stressing the various phases of public relations. The program was approved in principle with certain modifications, at the discretion of the president and Dr. Molitch.

Revision of our 16-year old constitution was discussed, and Dr. Allman was appointed chairman of the committee to revise the constitution and by-laws.

Recommendations for revision of the communicable disease code were again discussed. It was suggested that all municipalities have a uniform code, that a special committee be appointed, that the health officer of each municipality be a member of the committee, and that Dr. Walter Stewart be appointed as chairman.

It was announced that the compilation of biographies of members, by the Auxiliary, would be revised, and that newspapers would be advised where to obtain these biographies when occasion demanded.

BERGEN

John E. McWhorter, M. D., Reporter

The *Bergen County Medical Society* held its regular meeting at the Red Lion Inn, Hackensack, on June 10. Dr. G. Barton Barlow, President, introduced the new officers elected for the coming year: President—Dr. Winton H. Johnson; Vice-President—Dr. Thomas DeCecio; Secretary—Dr. John E. McWhorter; Treasurer—Dr. Frederick L. Muller.

An enjoyable social get-together preceded the business meeting.

GLOUCESTER

Ralph L. Moore, M.D., presided at the September 17 meeting of the *Gloucester County Medical Society* which was held at the Homestead, in Woodbury.

The first portion of the meeting was devoted to the scientific program, the speaker being Dr. Harold Lefkoe, orthopedist at the Einstein Medical Center, Philadelphia. Dr. Lefkoe's discussion of cerebral palsy was in the unusual form of a book review of a best seller of last year, "Karen."

Dr. Moore announced the appointment of Dr. A. Guy Campo, to the State Committee for Revisions in the Medical-Surgical Plan, and Drs. Baxter A. Livengood, John J. Laurusonis, and Cecil C. Sheets to the county Medical-Surgical Committee. Dr. Chester I. Ulmer was appointed to the Welfare Committee.

The society voted to cooperate with the Red Cross in the collection of blood in the county.

HUDSON

Harry T. Aronowitz, M.D., Reporter

The annual meeting of the *Hudson County Medical Society* was held on May 5, Dr. Harry J. Perlberg presiding.

Elected to active membership were: Drs. Clifford B. Blasi and John J. Crosby, Jersey City, and Salvatore J. LaPilusa, Bayonne.

Elected to office for the coming administrative year were the following:

President: Dr. Joseph P. Donnelly; President-Elect: Dr. Edward G. Waters; Vice-President: Dr. Sigmund C. Braunstein; Secretary: Dr. Conrad M. Bahnson; Treasurer: Dr. John E. Annitto.

Guest speaker of the evening was Dr. Harrold W. Jacox, Professor of Radiology, College of Physicians and Surgeons, Columbia University, who discussed the value and limitation of radiation therapy.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Advances in Pediatrics, Volume V. Edited by S. Z. Levine, M.D., Professor of Pediatrics, Cornell University Medical College. Pp. 273. Chicago, The Year Book Publishers, Inc., 1952. ($7.00)

For five years it has been a pleasure to receive each volume of Advances in Pediatrics. The material is excellent, the editing fine, the printing and publishing of the best. The new publishers have, if anything, improved the type face and format.

As in the past, a selection of monographic reports make up the volume, each written by an authority. The titles and their authors will almost suffice to give the gist of the contents. All topics are timely, well covered and are of great interest to any physician who treats children.

The first article is "Advances in the Treatment of Bacterial Meningitis" by Hattie E. Alexander. This is particularly recommended. Following is the "Nephrotic Syndrome in Children" by Barnett, Forman and Lauson of Cornell. This is a fine presentation, summarizing the latest in physiology and therapy of this most difficult illness.

Next is "The Relation of Vitamin K Deficiency to Hemorrhagic Disease of the Newborn" by H. Dam and his Danish colleagues. Dam has always been a leader in vitamin K research. "Angiocardiographic Studies in Children" by John Lind and Carl Wegelus gives an interesting outline of what is being done in one of the most progressive centers in Europe—Stockholm.

Carl Smith and his associates at Cornell present a basic study of the role of blood proteins in "Iron Metabolism in Infants and Children." The final monograph covers a subject which has, perhaps, received all too little attention in this country. It is a study of "BCG Vaccination" by Arvid J. Wallgren of Sweden.

All the articles are of a definitive type. This annual volume maintains the previous high standard and deserves wide reading.

Milton M. Willner, M.D.

Ophthalmic Pathology; An Atlas and Textbook. By Jonas S. Friedenwald, Helenor Campbell Wilder, A. Edward Maumenee, T. E. Sanders, John E. L. Keyes, Michael J. Hogan, W. C. and Ella U. Owens. With the editorial assistance of Helen Knight Steward. Published under the joint sponsorship of The American Academy of Ophthalmology and Otolaryngology and the Armed Forces Institute of Pathology. Pp. 489 with 260 plates. Philadelphia, W. B. Saunders, 1952. ($18.00)

This notable work is, as explained in its preface, an outgrowth of the Atlas of Ophthalmic Pathology by De Coursey and Ash of the Army Medical Museum which first appeared in 1938. This earlier work was one of a number of excellent atlases in various special fields of pathology prepared by the Army Medical Museum and its successors, the Army Institute of Pathology and Armed Forces Institute of Pathology, based on pathologic material registered there.

The present volume is, as indicated in the title, a textbook of ophthalmic pathology, as well as an atlas, and hence its scope and usefulness are increased. In addition to 260 full page plates, each containing from one to eight photomicrographs, there is extensive textual presentation of pathologic changes in the eye, by a group of outstanding experts.

The purpose of this volume, as with its predecessor and the various other atlases of special pathology of the Armed Forces Institute of Pathology, is primarily one of instruction. It is directed particularly toward those preparing for Board certification and for ophthalmologists studying the pathology of their specialty. For this reason, presumably, there are included chapters on the normal anatomy and histology of the eye and associated structures, and of general pathologic processes. Although, according to the preface, this is not designed as a work of reference it will certainly serve as such in many instances, and will be of much usefulness to the pathologist as well as the ophthalmologist.

There is little to criticize. The photomicrographs are of the usual splendid quality of the Armed Forces Institute of Pathology. The text is concise but lucid and appears well unified. This is a valuable contribution and one may hope for further combined atlas-texts of this sort in the various special fields.

Milton Kannerstein, M.D.

Treatment of Mental Disorder. By Leo Alexander, M.D., Director, the Neurobiological Unit, Division of Psychiatric Research, Boston State Hospital, and Instructor in Psychiatry, Tufts Medical School. Pp. 507. Philadelphia, W. B. Saunders Company, 1953. ($10.00)

The avowed purpose of this book is to demonstrate how psychic and physical aids may be "used as one instrument" in psychiatric therapy. The author outlines briefly how a knowledge of psychodynamics and simple psychotherapeutic principles may be integrated with the chief physical methods used in modern psychiatry. In terms of space, however, the book is devoted to the latter discipline. Thus, of the five hundred odd pages, two are devoted specifically to psychoanalytic technic and less than ten per cent of the book is devoted to psychotherapy. Whereas the author is lucid, precise, and complete in his descriptions of physical factors, he is vague and cursory in discussing cultural and emotional factors. Perhaps a more appropriate title might have been "Physiologic Treatment of Mental Disorder."

The use of electric shock therapy is described in a variety of conditions including involutional psy-

choses, manic depressive psychoses, schizophrenia, depressed alcoholics, barbiturate intoxication, depression associated with narcotic addiction, functional illness associated with cerebral arteriosclerosis, and mental disturbance associated with multiple sclerosis. After a few short introductory chapters dealing with cultural, psychologic, somatopsychic, geneto-dynamic background material, and outlines of psychotherapeutic methods, there follow comprehensive, well-documented chapters dealing with general principles, electric properties, neurophysiologic aspects, complications, mode of action and practical technics of shock therapy.

The book contains many helpful hints for preventing complications and failures such as the deletion of the clonic phase of the convulsion to reduce cardiac strain and replace curare; use of the Funkenstein test; reduction of memory defect and post-shock-anxiety-build-up by combined convulsive and non-convulsive treatment; training for nurse-assistants.

His development of the use of non-convulsive technics may be the answer to the handling of anxiety build-up in some shock-treated patients and the use of the Funkenstein test in the author's hands has been an invaluable aid in indicating whether convulsive or non-convulsive therapy be used.

It is the author's belief that defensive operations (of the ego) are affected in specific ways by various methods of physical treatment. Thus, electroshock strengthens certain defenses and replaces poor or non-efficient ones with better ones. Lobotomy is followed by the substitution of less healthy defenses, *i.e.* the mechanism of denial; non-convulsive electric treatment "lowers defenses," *i.e.* reduces anxiety, so that the patient can come to grips more realistically with his problems.

In his chapters describing the mode of action and results of psychotherapy, he begins, "The fundamental dynamic forces in mental disorder are hate, guilt, and fear. It is obvious that the treatment for hate is love (Thompson); the treatment for guilt is understanding; and the treatment for fear and anxiety is communication (Ruesch and Prestwood)." The psychotherapeutic management, however, of these problems is not dealt with and the reader is referred to other sources. He makes a rather strong argument backed by copious statistics that depression and regressive psychoses in general respond better to shock therapy than psychotherapy and reports that with the use of both convulsive and non-convulsive therapy, employing clinical psychiatric evaluation and the Funkenstein test, he was able to obtain 91 per cent success in the treatment of twenty-three consecutive, unselected psychotic patients. Thus for the psychiatrist who wishes to sharpen his skills with the use of physiologic methods in psychiatry, and particularly in using the Reiter machine, this work is highly recommended. Because of its abundance of references, it should be of value to the student who seeks to find a rationale and references for treatment by physical methods. While excellent for the above reasons, the book has restricted value to the psychotherapist except as he may treat patients by physical methods.

In the reviewer's experience, some patients who have been failures with shock treatment have been helped by psychotherapy and vice versa. This perhaps poses a question which the book does not answer; namely, what are the indications for each? The author's chief guide for the use of psychotherapy is based on "the degree to which insight into the dynamics can be made meaningful to the patient and can enable the patient to participate in reality-testing under the therapist's guidance." While this is theoretically meaningful to the experienced psychiatrist, to the beginner it gives little practical help.

This is another one of the many attempts to explain and treat mental phenomena on both neurovegetative and psychic levels. To those who believe that neurophysiologic methods are the answer, this book will seem to be an affirmation, whereas those who believe that psychologic determinism is paramount will find the text lacking in balance. It is highly recommended as a reference text, therefore, to be used in conjunction with psychodynamically oriented work.

BERNARD R. GOLDBERG, M.D.

Synovial Fluid Changes in Joint Disease. By Marian W. Ropes, M.D. and Walter Bauer, M.D. Pp. 150. Cambridge, Mass., Harvard University Press, 1953. ($4.00)

This is a concise, authoritative treatise on the diagnostic and prognostic significance of joint fluid changes in the various arthritides. It should prove of great value to rheumatologist, orthopedist, and internist alike.

In January, 1950, D. V. Davies, in an article on the structure and functions of the synovial membrane in the British Medical Journal, stressed the paucity of original observations and published literature on this subject.

The authors present detailed considerations of their twenty-year study on the origin and properties of normal synovial fluid and the changes noted in various pathologic states involving joint fluid. The aspirated joint fluid is studied from the standpoint of amount and gross appearance, cytologic findings, bacteriology, physical and chemical changes and reponse of the fluid cytology to the administration of ACTH and cortisone. Intra-articular pressures were taken at the time of aspiration.

Based on their first eight hundred fluid studies, Drs. Ropes and Bauer were able to divide pathologic effusions into two major groups as follows: group I—fluids with relatively slight abnormalities found in inflammatory reactions of traumatic origin; group II—fluids with changes as noted in rheumatoid arthritis and infectious arthritis.

Three chapters are devoted to a correlation of each individual characteristic of joint fluid with the disease states in groups I and II above. Wherever possible, the diagnostic significance of the physiologic alterations are stressed.

Chapter VI summarizes the diagnostic and prognostic value of the examination of the aspirated joint fluid. Short, illustrative case reports are very helpful.

Three pages on the physiologic considerations in-

volved and an excellent composite chart complete this fine work. It is relatively short, yet comprehensive; easy to read, yet understandable and highly instructive.

Sol Parent, M.D.

Children of Divorce. By. L. Louise Despert, M.D. Pp. 282. No index. Garden City, N. Y., Doubleday and Company, 1953. ($3.50)

Every good physician is, in a sense, a family doctor, involved in family problems. Since 20 to 30 per cent of all marriages now end in divorce, and since there are now a million and a half children (under the age of 18) whose parents are divorced, the problem of children of divorce is a large one. Dr. Despert, a well known psychiatrist, has had a unique opportunity to work with such children. The shrewd distillate of that experience makes up this unusual book.

Over and over again, in this book, she reassures the parent that divorce does not necessarily mean tragedy for the children. Chapter 1, indeed, is comfortably entitled "Divorce is not Disaster." Incompatibility between the parents—"emotional divorce" as she calls it—and not legal divorce is the destroyer of children. Legal divorce, Dr. Despert feels, may be a cleansing and healthy experience. The key to the child's adjustment is, in such situations, the love relationship of each separate parent, as an individual, to the child.

The book is salted with many case reports, describing situations with which one or another divorced parent can be identified. There is down-to-earth practical advice too, ranging from how to handle the occasional "visitation" from the absent, divorced parent to where to find social agencies that can give help or advice. There is even a blueprint for a better domestic relations court system. The focus is always, however, on how the parents and step-parents can guard the children of divorce from serious and lasting emotional trauma. Such difficult points are discussed as, for instance, how to apprise children of various ages of an impending divorce or separation. There is an excellent chapter on some of the legal aspects of divorce, and a gem of a monograph on the concept of the love relationship between parents and children. It is a book which gives insight into how it happens that, as the author says, America is the land of happy children and neurotic adults. All together, it is a book to prescribe for divorced or about-to-be-divorced parents and a repository of useful information and sound philosophy for the family doctor.

William Schram, M.D.

Letters to a Doctor's Secretary. By Anna Davis Hunt. Pp. 75. Rutherford, N. J., 1952. Medical Economics, Inc. ($2.00)

Compiled from a series which appeared in Medical Economics starting in November, 1951, this little gem consists of sixteen chapters serving as a guide to a physician's nurse-secretary. As such, it is a valuable outline of the duties of an office assistant, but goes even further in giving detailed advice concerning every phase of running a doctor's office. No stone is left unturned, the tyro office secretary being advised to start her day, "the night before, when you take a warm bath, brush your hair, cream your face, and relax in bed for at least eight hours' sound sleep. When your alarm goes off, you rise, eat a nourishing breakfast, without hurrying, and get to the office five minutes *before* 9". This sets the style of the book, which continues by explaining just how telephone calls are handled, how to take care of mail, send out bills, collect from slow-paying patients, etc. It also goes into the details of bookkeeping, and introduces the subject of medical etymology. A quiz at the end of the book offers a little test of how much has been absorbed by the reader.

As a guide to a physician's assistant, this little treatise is stimulating, readable, and informative. Its brevity precludes completeness, but as an introduction to the subject it is recommended to every girl who aspires to work in a physician's office, particularly if she has had no formal training in this field.

E. Hedwig Knopf, R.N.

BCG Vaccination. Studies by the WHO Tuberculosis Research Office, Copenhagen. By Lydia B. Edwards, M.D., Carroll E. Palmer, M.D., Ph.D., and Knut Magnus, cand. act. Pp. 307. Geneva, World Health Organization, 1953. ($3.00)

This exhaustive statistical monograph offers excellent technical information to anyone interested in the BCG problem. It gives a detailed analysis of 23,000 vaccinations given to a group of 40,000 tuberculin tested school children in Denmark, Mexico, Egypt and India. There is no critique of the pros and cons of BCG vaccination, but rather a presentation of facts relating to such subjects as: the effects of long-continued storage, heat, light, changes in the technic of intracutaneous vaccination, variations in the preparation and concentration of the vaccine, mixtures of living and dead bacilli in different proportions, and the variability of vaccines prepared by different producers. In the first 146 pages these factors are discussed and analyzed in the light of the information gained from numerous statistical tables contained in a 161-page appendix.

The authors present an interesting observation on tuberculin sensitivity which does not conform with generally accepted views. They present evidence of two kinds of sensitivity. One, designated as high-grade sensitivity, (fairly strong reactions to a weak dose of tuberculin) constitutes the specific response to tuberculous infection in the classical sense. The other, designated as low-grade sensitivity (small reactions to a weak dose of tuberculin which appear as larger reactions to a strong dose), constitutes a "non-specific" response, i.e., a response to tuberculin the cause of which is still unknown. On the basis of purely epidemiologic-statistical evidence they postulate that this latter type of sensitivity is the result of something other than infection with *Mycobacterium tuberculosis.*

For all physicians and public health workers interested in the problems of tuberculin allergy and BCG vaccination this monograph offers excellent reference material.

Lewis F. Baum, M.D.

TUBERCULOSIS

ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI October, 1953 No. 10

TREND OF TUBERCULOSIS MORBIDITY

By Julius Katz, M.D., The American Review of Tuberculosis, March, 1953.

In contrast to well-documented evidence of the marked decrease in mortality from tuberculosis during the past 50 years or more, there is a dearth of reliable information regarding morbidity from this disease. The number and ratio of deaths and reported cases are used, therefore, to estimate the trend of morbidity. Recent reports based upon these statistical data conclude pessimistically that, while the number of deaths and the death rates from tuberculosis have decreased considerably since 1900, the rate of development of new cases of this disease has not changed or is increasing.

It has been stated by Edwards and Drolet that "a widening gap is developing between the tuberculosis morbidity and mortality in the United States," while Drolet and Lowell conclude that "it is primarily institutional care, or rather improved medical and surgical treatment of active cases of tuberculosis, which is now modifying so favorably the mortality record. Where tuberculosis campaigns remain weak, however, is still in the field of prevention with regard to reducing outbreaks of new cases of tuberculosis."

The conclusions to be drawn from these statements are that tuberculosis is mainly a clinical problem and that tuberculosis control programs have failed to prevent the spread of the disease. In this paper the available morbidity data are reviewed in an effort to determine the trend of the incidence of tuberculosis for upstate New York (New York State exclusive of New York City).

Before considering morbidity, however, the effect upon the reduction in death rate of institutional care, or of improved medical and surgical treatment of active cases of tuberculosis, needs consideration. In order to make it clear that factors other than hospitalization and treatment are involved in the declining death rate, it is only necessary to point out that the decline is not of recent origin. In upstate New York facilities for the hospitalization of the tuberculous were quite limited until approximately 1915. During the early years of this century treatment was limited mainly to bed rest, with pneumothorax and surgery being used infrequently. Nevertheless during these years there was a continuous decrease in the death rate. Even after specific therapeutic measures came into common usage, their effect was not reflected by sharp changes in the death rate since 1900. Until recently the percentage of patients who received such specific treatment for tuberculosis was too small to affect the death rate significantly.

For additional evidence that the decrease in the tuberculosis death rate is not entirely dependent upon specific therapy, the experience in the control of tuberculosis among patients in state mental institutions may be cited. During the 10-year period beginning with 1941, the rate of decrease of tuberculosis mortality among these patients has been similar to that for New York State as a whole. This similarity in change in death rate among mental patients (whose average age is approximately 52) to that in the general population (with an average age of approximately 35) is an indication that factors other than specific treatment are also involved in the reduction of deaths from tuberculosis.

It appears, therefore, that the hospitalization of tuberculous patients and their treatment are not the only causes of the changes in death rates. Of equal importance to those concerned with the con-

trol of tuberculosis is the validity of the statement regarding failure in the preventive phase of tuberculosis campaigns.

Since accurate information regarding the incidence of tuberculosis in the general population is non-existent, Drolet and Lowell use the number of reported cases and the ratio of cases to deaths as indices of the rate of development of the disease. They discuss the marked decrease in the number of deaths from tuberculosis between 1930 and 1950, during which time the number of cases reported annually remained the same so that the ratio of cases to deaths ("community case fatality") decreased from 70 to 29 per cent. They infer that the incidence of tuberculosis has not decreased during this 20-year period.

These data, however, do not take into consideration the number of persons examined and the percentage yield of cases of tuberculosis. While the number of cases of tuberculosis reported annually may be a reasonably accurate index of the trend of the annual incidence rate, this is true only when case-finding activities remain at the same level year after year. In studying the trend in incidence, the percentage yield of cases of tuberculosis among those examined is more important than the total number of cases found annually. If the composition of the groups examined remains essentially unchanged and the rate of development of new cases is constant, the percentage yield of new cases should also remain constant. On the other hand, any change in percentage yield of new cases in such groups may be due to a corresponding change in the incidence rate. For the study of the trend in incidence, data obtained from official case-finding activities in upstate New York are used.

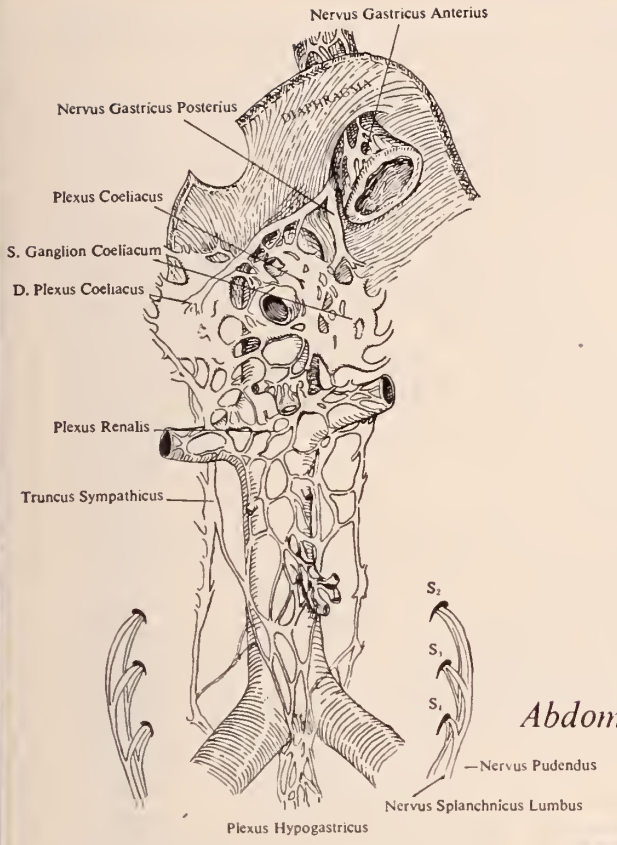
Tuberculosis hospital clinics: In spite of an increase of 40 per cent in the number of persons examined in 1948-1950, compared with 1939-1941, there was a decrease in the number of cases reported from the clinics of state and local tuberculosis hospitals in upstate New York. The percentage yield decreased 40 per cent during this time, from 2.8 to 1.7. Part of this decrease may be due to the fact that during the later years groups of patients reporting for roentgenograms only are included. Among these groups the tuberculosis case yield is lower than among contacts and suspects. The decrease in the total number of reported cases, as well as the lower case yield, is evidence of a decrease in the incidence of tuberculosis in the population served by these hospitals.

Community survey and general hospital admissions: Similar results were obtained among persons examined in community surveys and those examined roentgenographically upon admission to general hospitals in upstate New York. In spite of a 57 per cent increase in the number of examinations in 1950-1951, compared with 1948-1949, there was an increase of only 21 per cent in the number of cases diagnosed, while the percentage yield of cases of tuberculosis decreased 22.9 per cent. The lower percentage yield of new cases of tuberculosis in these large segments of the upstate population can be due only to a decrease in the rate of development of new cases. It is probable that this reduction in incidence is an important cause of the decrease in tuberculosis death rates.

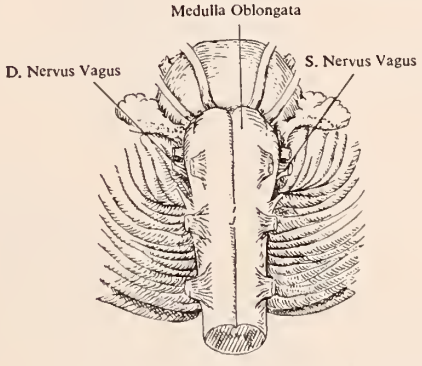
A study of the total number of cases reported and the case rates for the past 16 years in upstate New York shows that the ratio of cases per 100,000 population decreased from a three-year average of 99 in 1935-1937 to 68 for 1948-1950. Part of the decrease may be due to a larger number of persons examined in mass surveys, among whom the percentage yield is lower than among contacts, suspects, or hospital admissions. The fact that the trend over the years for the entire population is toward a lower rate, as it is in the special population groups just mentioned, suggests a similar basic cause, a reduction in the incidence of the disease.

In spite of the decreasing incidence and number of deaths, tuberculosis still remains high on the list of causes of illness and death, and requires continuation of all efforts for its control. Those concerned with the effect of tuberculosis upon the public health are, nevertheless, entitled to know that the disease is yielding to these efforts.

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1. Zupko, A. G.: Pharmacology and the General Practitioner, GP 7:55 (March) 1953.

2. McHardy, G. G., and Others: Clinical Evaluation of Methantheline (Banthīne) Bromide in Gastroenterology, J.A.M.A. *147*:1620 (Dec. 22) 1951.

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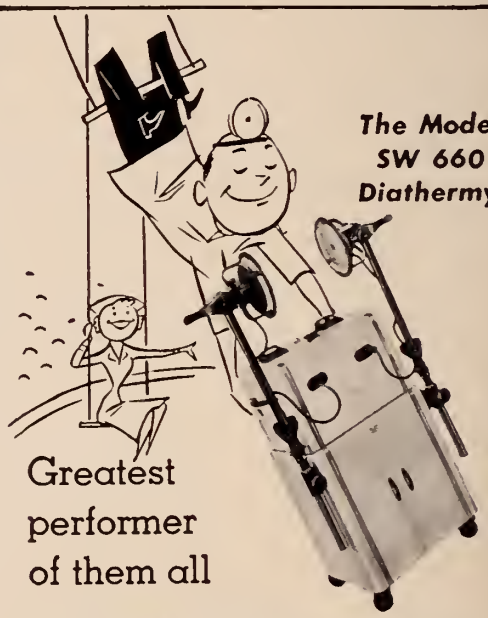
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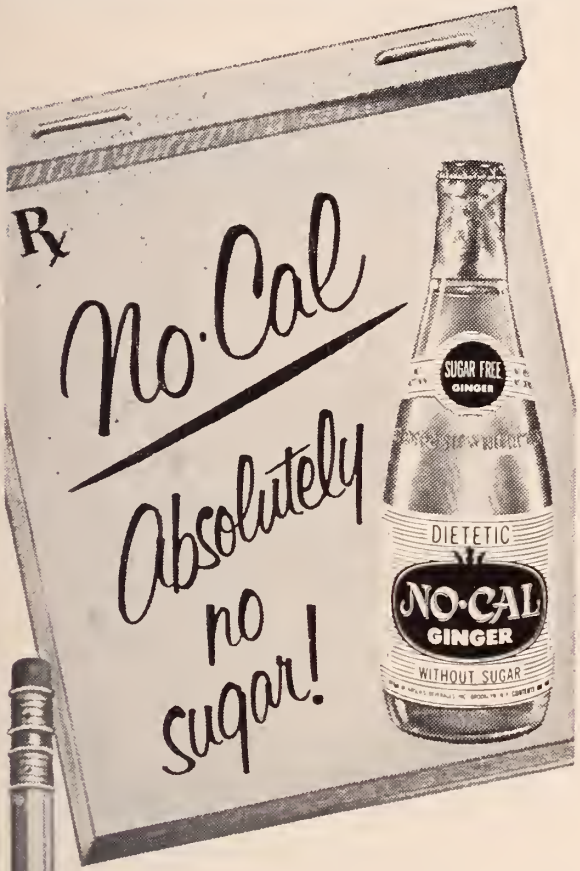
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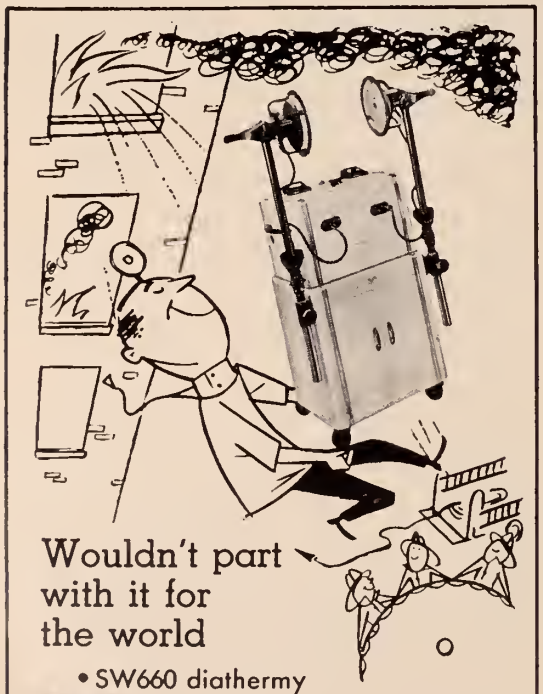
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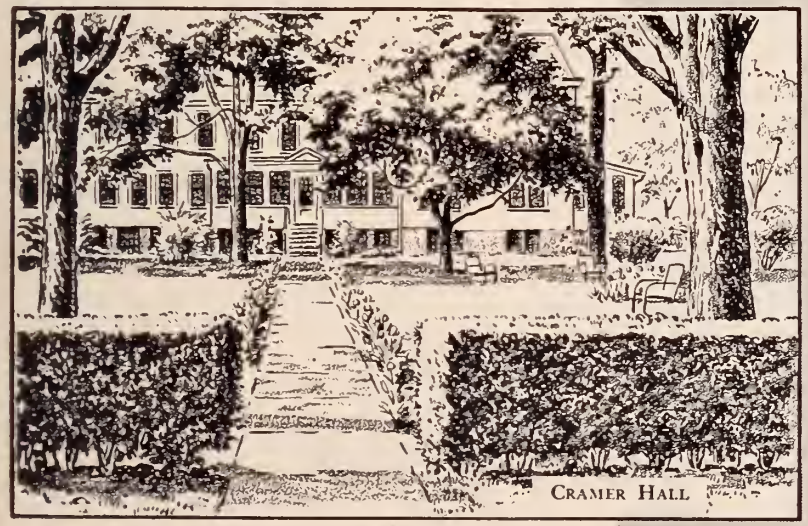
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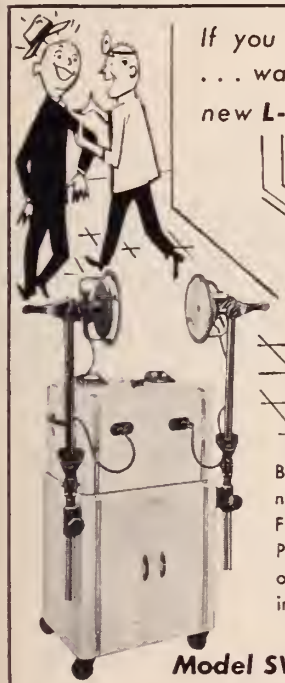
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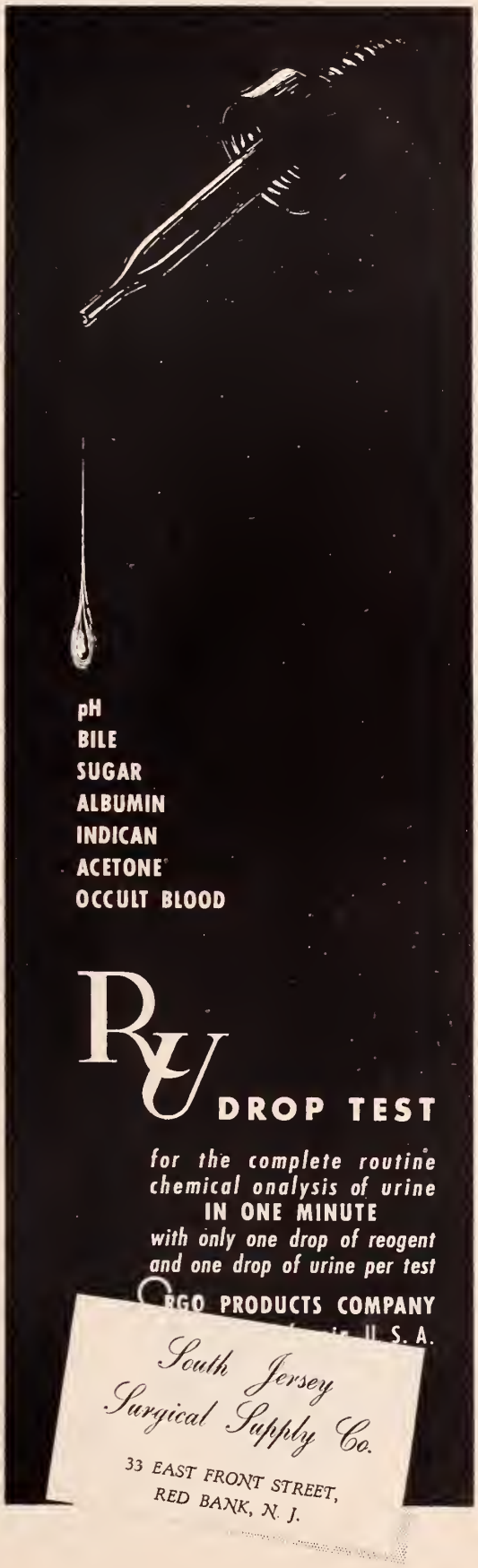


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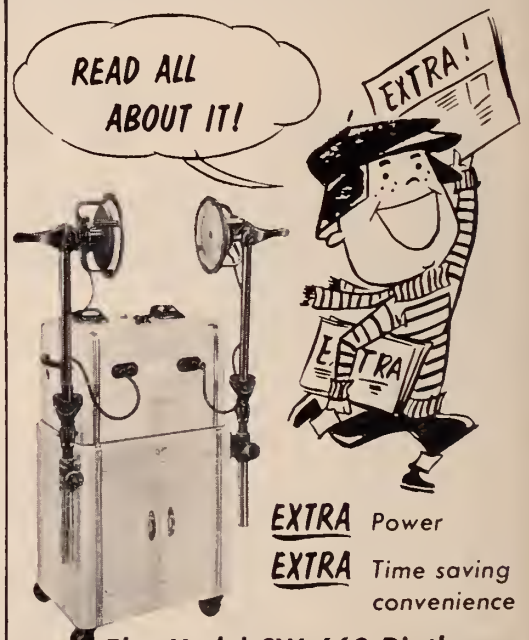
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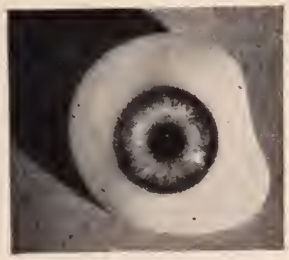


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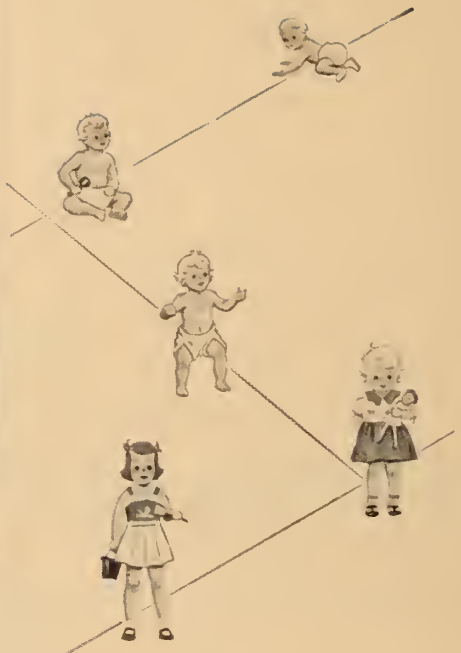
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CONTENTS—Pages 487 to 534

EDITORIALS— Page

IN MEMORIAM 487

PREVENTIVE CRIMINOLOGY 489

ORIGINAL ARTICLES—

SELECTION OF CASES FOR MITRAL COMMISSUROTOMY—Nicholas A. Antonius, M.D., Ralph Miller, M.D., Henry Green, M.D. and Anthony D. Crecca, M.D., Newark, N. J. 490

MEDICAL DEGREES IN NEW JERSEY—Fred B. Rogers, M.D., Trenton, N. J. 496

INFARCTION OF THE LIVER DUE TO POLYARTERITIS NODOSA—H. Preston Price, M.D. and Curtis J. Flanagan, M.D., Jersey City, N. J. 500

ASTHMA IN THE FIRST YEAR OF LIFE—William P. Buffum, M.D., Providence, R. I. 503

IATROGENIC MENINGITIS—Milton Cutler, M.D. and Paul Cutler, M.D., Hammonton, N. J. 510

ORIGINAL ARTICLES— Page

IDIOPATHIC HEMORRHAGIC INFARCTION OF THE TESTIS IN THE NEWBORN—Anthony R. Fernicola, M.D., Newark, N. J. 515

ORGANIC DISEASES SIMULATING PSYCHOGENIC DISORDERS—A. D. Dennison, Jr., M.D., Indianapolis, Indiana 520

ANNOUNCEMENTS 524

OBITUARIES 525

LETTERS TO THE JOURNAL 526

COUNTY SOCIETY REPORTS 527

WOMAN'S AUXILIARY 529

BOOK REVIEWS 530

TUBERCULOSIS ABSTRACTS 533

Roster of Officers, Advertising Page 3A

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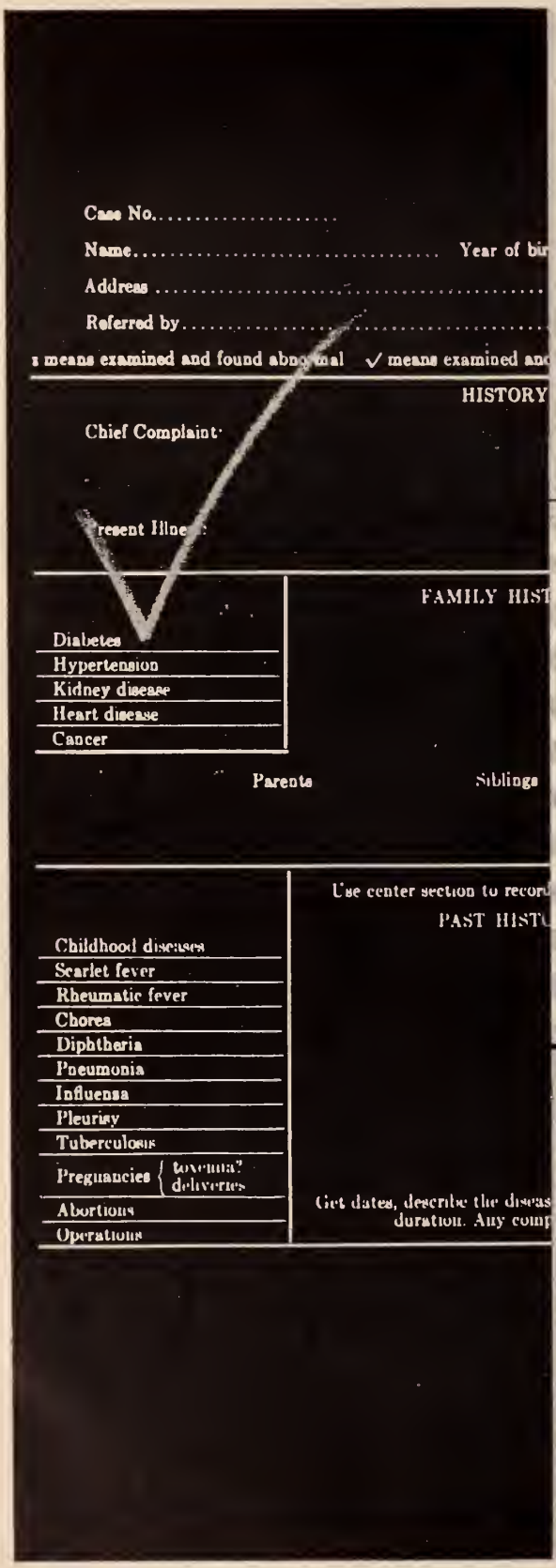
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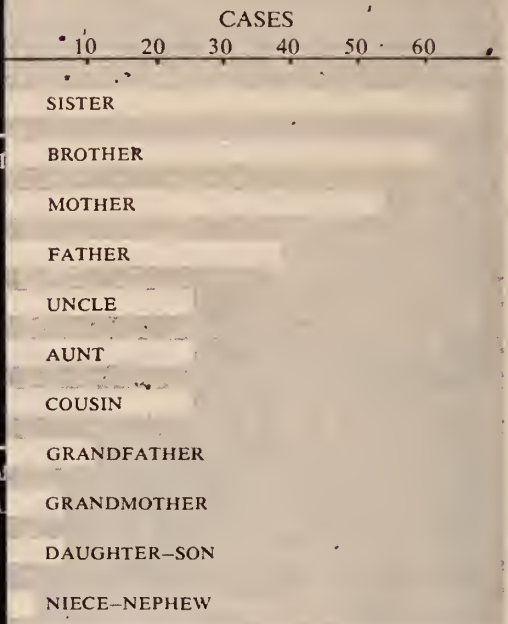
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1. Moyer, J. H., et al.: Am. J. M. Sc. *225*:379 (April) 1953.
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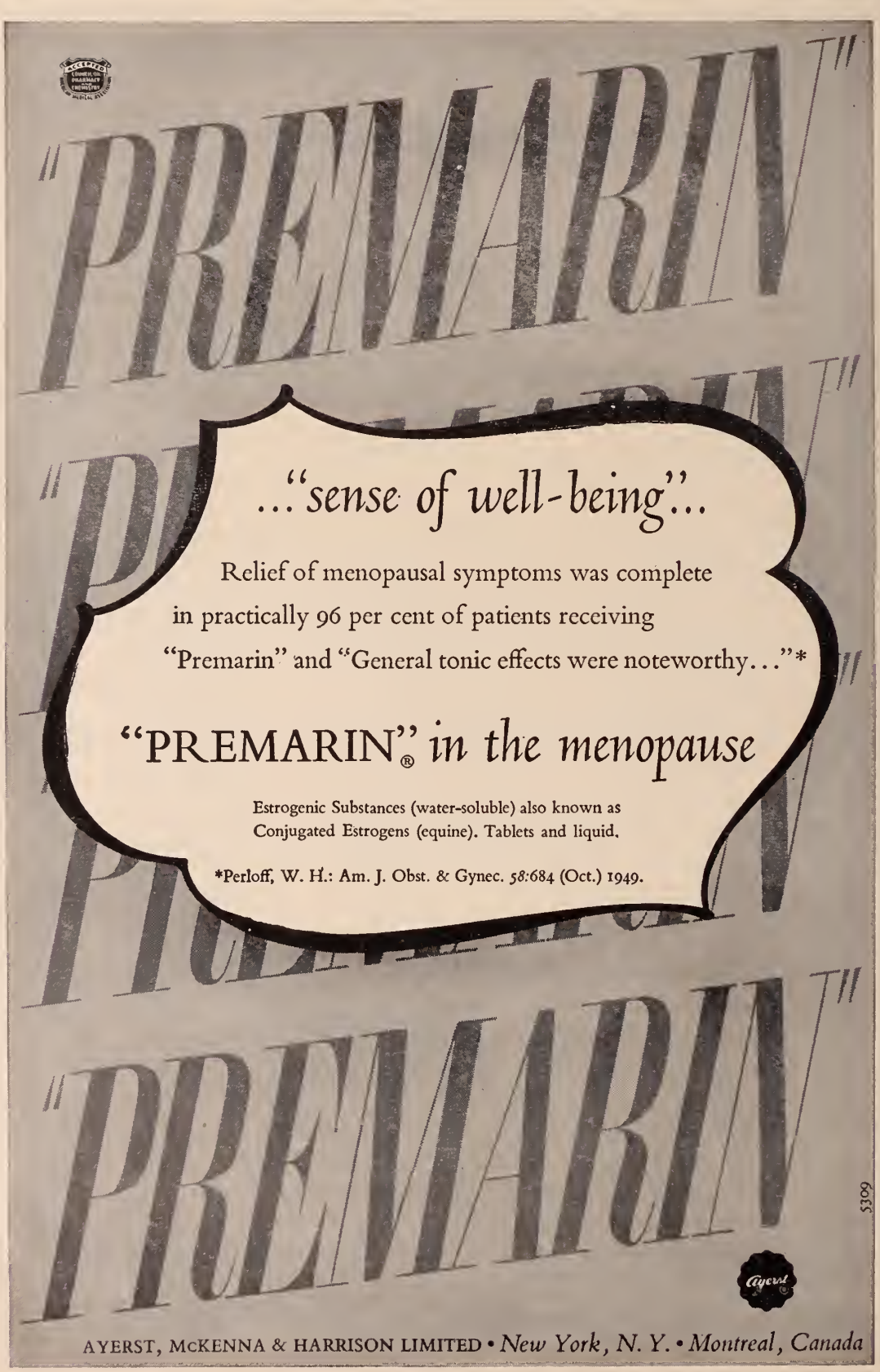
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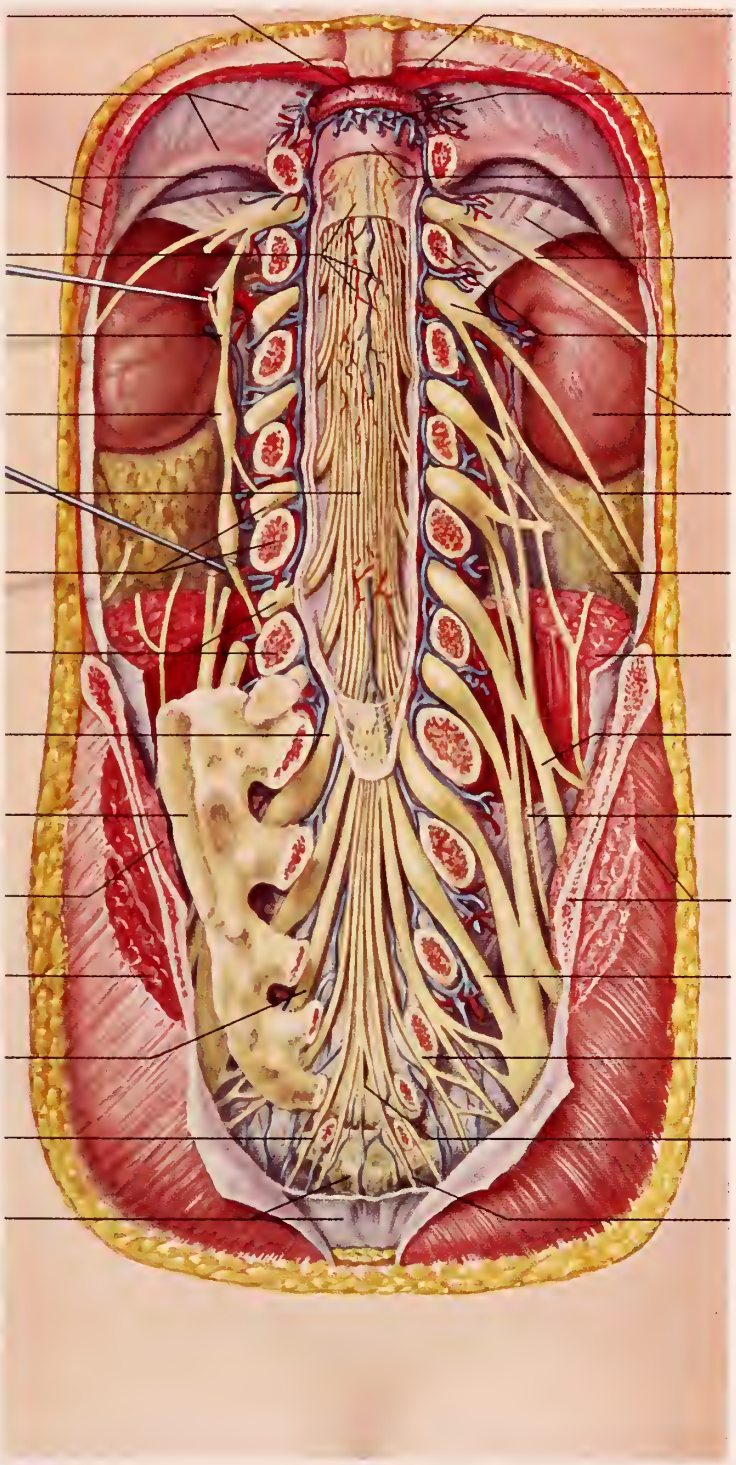
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*Perloff, W. H.: Am. J. Obst. & Gynec. 58:684 (Oct.) 1949.
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1. Drabkin, D. L.: Metabolism of Hemin Chromoproteins, Physiol. Rev. *31*:345 (1951).
2. The Biosynthesis of Hemoglobin, Editorials, J.A.M.A. *150*:1223 (Nov. 22) 1952.

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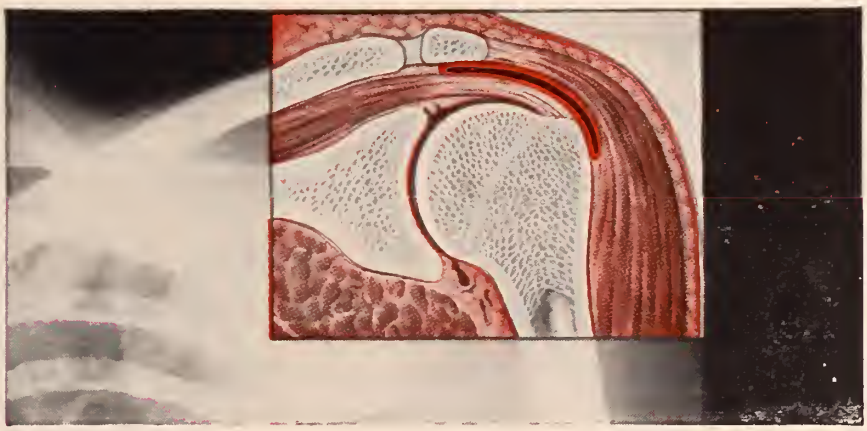
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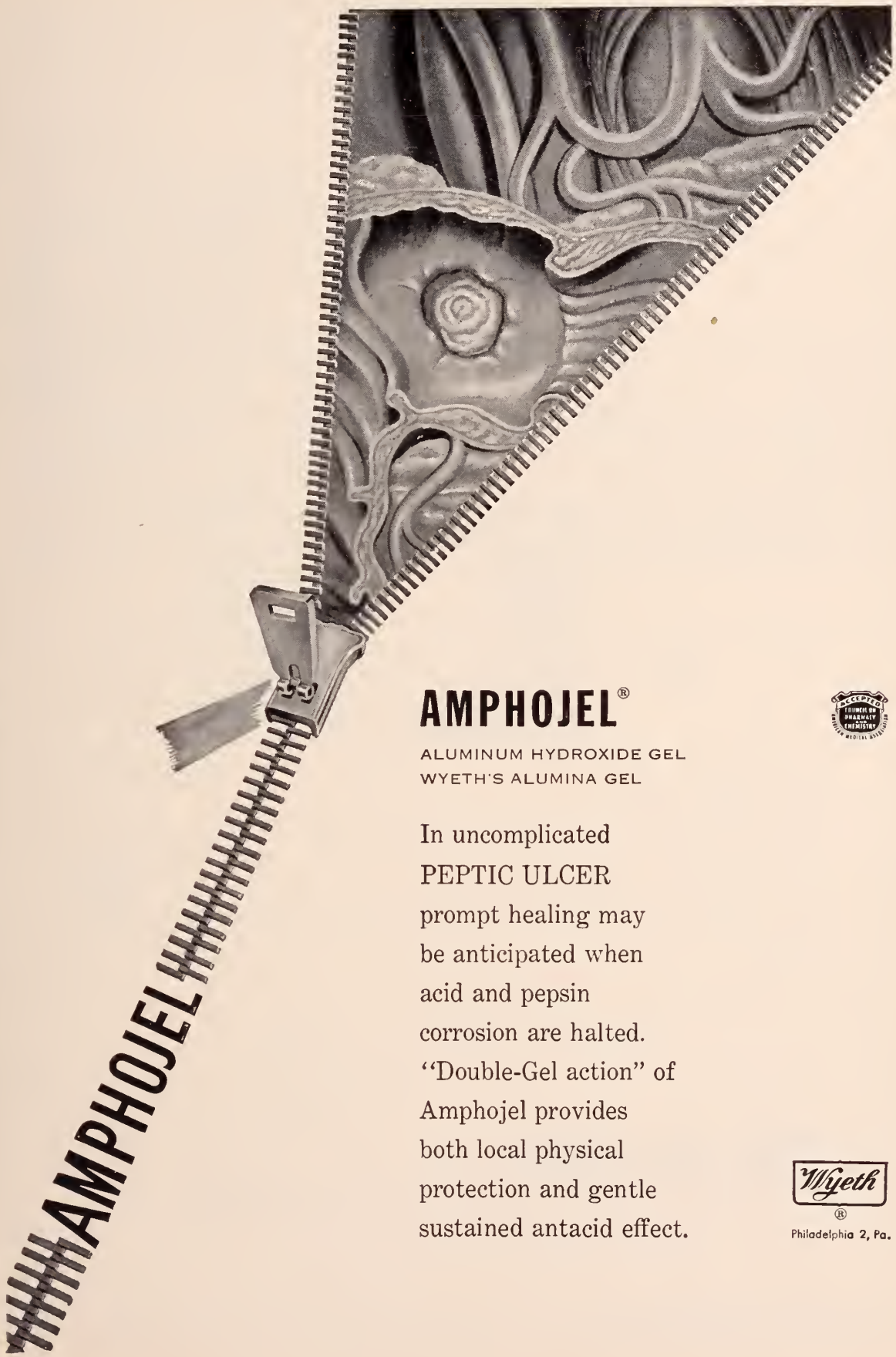
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Phenobarbital (caution: may be habit forming)	5.0 mg.
Methylcellulose	70.0 mg.
Magnesium Trisilicate	50.0 mg.
Calcium Gluconate	65.0 mg.
Dicalcium Phosphate Anhydrous	100.0 mg.
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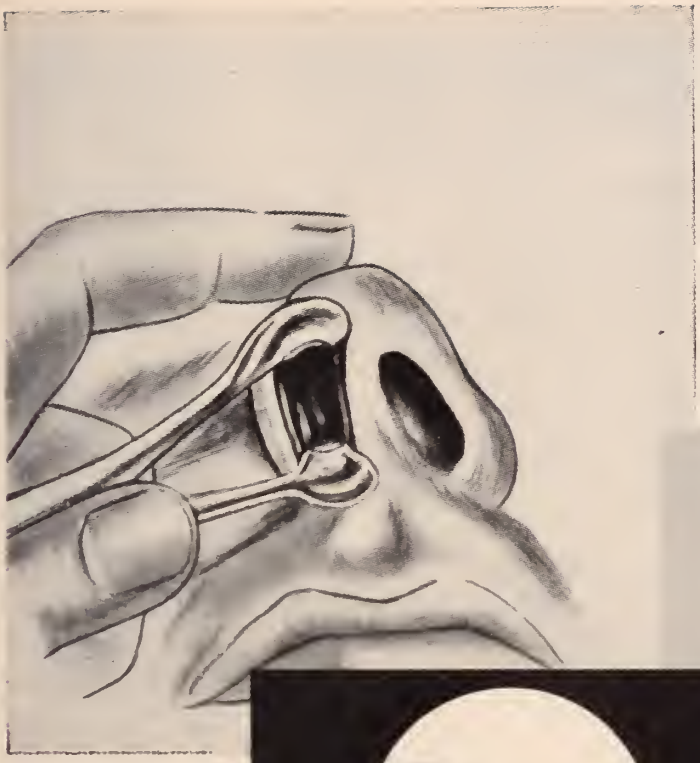
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Actions and Uses.—Nitrofurantoin, a nitrofuran derivative, exhibits a wide spectrum of antibacterial activity against both gram-positive and gram-negative micro-organisms. It is bacteriostatic and may be bactericidal to the majority of strains of Escherichia coli, Micrococcus (Staphylococcus) pyogenes albus and aureus, Streptococcus pyogenes, Aerobacter aerogenes, and Paracolobactrum species. The drug is less effective against Proteus vulgaris, Pseudomonas aeruginosa, Alcaligenes faecalis, and Corynebacterium species; many strains of these organisms may be resistant to it. However, bacterial resistance to other anti-infective agents is not usually accompanied by increase in resistance of the organisms to nitrofurantoin. The drug does not inhibit fungi or viruses.

Nitrofurantoin is useful by oral administration for the treatment of bacterial infections of the urinary tract and is indicated in pyelonephritis, pyelitis, and cystitis caused by bacteria sensitive to the drug. It is not intended to replace surgery when mechanical obstruction or stasis is present. Following oral administration, approximately 40% is excreted unchanged in the urine. The remainder is apparently catabolized by various body tissues into inactive, brownish compounds that may tint the urine. Only negligible amounts of the drug are recovered from the feces. Urinary excretion is sufficiently rapid to require administration of the drug at four to six hour intervals to maintain antibacterial concentration. The low oral dosage necessary to maintain an effective urinary concentration is not associated with detectable blood levels. The high solubility of nitrofurantoin, even in acid urine, and the low dosage required diminish the likelihood of crystalluria.

Nitrofurantoin has a low toxicity. With oral administration it occasionally produces nausea and emesis; however, these reactions may be obviated by slight reduction in dosage. An occasional case of sensitization has been noted, consisting of a diffuse erythematous maculopapular eruption of the skin. This has been readily controlled by discontinuing administration of the drug. Animal studies, using large doses administered over a prolonged period, have revealed a decrease in the maturation of spermatozoa, but this effect is reversible following discontinuance of the drug. Until more is known concerning its long-term effects, blood cell studies should be made during therapy. Frequent or prolonged treatment is not advised until the drug has received more widespread study. It is otherwise contraindicated in the presence of anuria, oliguria, or severe renal damage.

Dosage.—Nitrofurantoin is administered orally in an average total daily dosage of 5 to 8 mg. per kilogram (2.2 to 3.6 mg. per pound) of body weight. One-fourth of this amount is administered four times daily—with each meal and with food at bedtime to prevent or minimize nausea. For refractory infections such as Proteus and Pseudomonas species, total daily dosage may be increased to a maximum of 10 mg. per kilogram (4.5 mg. per pound) of body weight. If nausea is severe, the dosage may be reduced. Medication should be continued for at least three days after sterility of the urine is achieved."



A new form of a synthetic narcotic analgesic . . .
approximately twice as potent as racemic Dromoran (dl)
Hydrobromide 'Roche' . . . inducing prompt pain relief
with longer duration of analgesic effect than morphine.

. . . indicated for the relief of severe or intractable pain . . .
preoperative medication and postoperative analgesia.
. . . "A striking characteristic is its ability to produce cheerfulness
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*Glazebrook, A. J.: Brit. M. J., 2:1328 (Dec. 20) 1952.

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the season
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The value of Terramycin in promptly controlling otitis media, severe sinusitis, laryngotracheobronchitis, bacterial pneumonia and virtually all infections of the respiratory tract, due to or complicated by the many organisms sensitive to Terramycin, is now a matter of clinical record.

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In pneumonia caused by pneumococci and staphylococci, 'Ilotycin' is very effective. Doses of 200 mg. every four hours are recommended.

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Q. How long should a streptococcus throat infection be treated with 'Ilotycin'?

The recommended minimum course for any antibiotic is five days. 'Ilotycin' completely cradicates the organisms within five days and thereby prevents recurrence of the infection.

Q. Is there any contraindication to the use of 'Ilotycin' immediately following a parenteral dose of penicillin?

No. 'Ilotycin' does not inhibit the activity of penicillin. There is probably no specific indication for using penicillin in addition to 'Ilotycin.' Experiments both in vitro and with animals have shown no evidence that 'Ilotycin' is either antagonistic to or synergistic with penicillin or the "mycins."

Q. Are coliform bacteria less sensitive to 'Ilotycin' than to other "broad-spectrum" antibiotics?

Yes. There is less possibility of monilia and fungus overgrowth in the intestinal tract with 'Ilotycin,' since the predominant organisms of the normal intestinal flora are relatively insensitive to the antibiotic action of 'Ilotycin.'

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IN MEMORIAM

Three physicians who made major contributions to The Medical Society of New Jersey during their long and fruitful lives, died during October. Each of these physicians Dr. Frank Overton, Dr. Joseph P. Londrigan, and Dr. Max Danzis, was not only famous in the particular branch of medicine in which he chose to participate, but made major contributions to the welfare of our society. Dr. Overton chose public health, medical history and medical journalism as his field of interest and served as editor of this journal from 1934 until 1941. Dr. Londrigan, a surgeon, took an active part in the affairs of his county and state medical societies. Dr. Danzis, also a surgeon, was eminent in philanthropic activities as well as his professional pursuits.

The Medical Society of New Jersey mourns the loss of these three outstanding men.

Frank Overton, M.D.

Dr. Frank Overton was born in 1867 and was a graduate of the College of Physicians and Surgeons, Columbia University, New York, class of 1893.

Dr. Overton started his medical career in private practice. Some years later, however, he became interested in the field of public health and won distinction as a district health officer for the state of New York. He was particularly skilled in the technic of making medical information interesting to non-professionals and he wrote several textbooks on physiology and other basic sciences which were used in the public schools of New York at that time. By virtue of his ability as an administrator and writer Dr. Overton was appointed editor of the journal of the New York State Medical Society, a post he held for ten years. In February 1934 Dr. Overton left

the New York Medical Society and assumed the editorship of our journal.

During Dr. Overton's period as editor of this journal his devotion to it was noteworthy, and he managed it with the same proficiency that had won him acclaim in public health. Dr. Overton's special interest was medical history and particularly when it pertained to New Jersey. As an editor Dr. Overton was meticulous in insisting upon absolute accuracy and exactitude, with the result that the journal achieved a new level of journalistic standards.

After resigning as editor of this journal in May 1941, Dr. Overton retired to Long Island where he resided for the remaining years of his life. In October, 1953 Dr. Overton died —The Medical Society of New Jersey has lost a real friend and great contributor.

Joseph F. Londrigan, M.D.

Dr. Londrigan was born in Hoboken on January 15, 1884 and was graduated from the University of Pennsylvania Medical School in 1910. After an internship at St. Mary's Hospital, Hoboken, he entered the practice of medicine in that city and was active until the time of his death on October 17. In 1920, Dr. Londrigan was elected medical director of the medical staff of St. Mary's Hospital.

Throughout his long career Dr. Londrigan was unusually active in the affairs of the Hudson County Medical Society and the state society. In 1925 he was president of his county medical society and in the same year, as chairman of a committee of the state society's Welfare Committee, he was instrumental in having the Hospital Lien Law passed by the state legislature. Dr. Londrigan also served as member of the state society's board of trustees from 1941 to 1945, as delegate to the American Medical Association from 1947 to 1953, and as chairman of the Veterans Liaison Committee from 1946 to 1950. In 1949 and 1950 he was chairman of the Honorary Membership Committee and was executive secretary to the Legislative Committee from 1950 until his death.

In addition to these activities Dr. Londrigan was consulting surgeon at North Hudson Hospital, Weehawken and on the staff of the Jersey City Medical Center.

In his earlier years Dr. Londrigan was an enthusiastic athlete and played professional baseball on the Jersey City team of the International League in 1910.

With the passing of Dr. Londrigan The Medical Society of New Jersey loses an ardent supporter who served conscientiously and well on many of its committees.

Max Danzis, M.D.

Dr. Max Danzis, one of New Jersey's preeminent surgeons, died in Newark on October 20, 1953. Dr. Danzis was born in Russia and came to this country at the age of 16 in 1890. In 1899 he was graduated from the New York University Medical School.

During Dr. Danzis' long and varied career he engaged in many interests outside of surgery. In 1901 he was co-founder of the Newark Beth Israel Hospital with Dr. Victor Parsonnet. In 1920 he became chief of staff of that hospital, retiring from this position in 1940.

Dr. Danzis was particularly active in encouraging young medical students and physicians and was responsible for starting scores of young men on their medical careers. He also had time to write thirty important medical papers which have been published in journals throughout this country. In 1949 he was appointed adviser to the University of Palestine in connection with its plans for founding a medical school. He was also a trustee of the old Newark University and of the American Hebrew University of New York.

Among the many honors which were awarded Dr. Danzis were the Unico award in 1950 as Newark's outstanding naturalized citizen and the Dr. Edward J. Ill award in 1941.

Dr. Danzis' passing represents a real loss to the medical profession of New Jersey.

PREVENTIVE CRIMINOLOGY

The kidnapping of Bobby Greenlease and his subsequent murder have aroused the people of the United States. Congress is considering making even more stringent the federal kidnapping laws which were passed after the Lindbergh case. Newspaper readers are familiar with the details of the Greenlease story, of how Bobby was abducted from a private school, taken to St. Joseph, Missouri, beaten, and finally shot to death and buried in a lime pit. Of even greater importance, however, than the details of the actual kidnapping and the payment of a ransom which reached a new high of $600,000, are the backgrounds of the principals in this heinous crime, Carl Hall and his paramour, Mrs. Heady. Hall, the perpetrator and son of a wealthy lawyer, rapidly dissipated his inheritance; shortly thereafter he began a life of crime, the culmination of which has now been reached. A review of his criminal record indicates that he was imprisoned on several occasions but each time was paroled after a fraction of the sentence had been served.

The macabre nature of this crime draws attention to the need for an entirely new approach to criminology by the citizens of this country. First and foremost, it is imperative for us to realize that the great majority of criminals are not merely normal individuals "gone wrong" but psychopathic individuals, as much in need of therapy as the out and out schizophrenic or manic-depressive. Innumerable psychiatric research projects have indicated that the so-called criminal, although not insane in the strict legal sense, is an individual with major emotional and psychologic defects. Once this concept of the psychopathic nature of crime is accepted it should become apparent that isolation from society and therapy are more cogent aims than is punishment in the traditional sense. The entire concept of prisons as places of detention for a period of time prescribed by statute and imposed by a judge, should be reconsidered. In its place prisons should be conceived of as rehabilitation centers—even hospitals—where the criterion for the duration of incarceration should be not a statutory time limit but the success with which each individual "patient" has achieved rehabilitation and is able to re-enter society as a law abiding citizen. The purpose of such institutions should be not so much to punish the person involved as to effect a restoration of his sense of responsibility to himself, his family and his fellow citizens. In similar vein, paroles for good behavior should not be based on the decision of a politically appointed board but upon the results of a study of each individual inmate by psychiatrists, social workers, legal experts and other professional persons. It is conceivable that certain individuals, after exhaustive social and psychiatric study, are "incurable" and may have to be incarcerated for life. This should be considered not a punishment for a particular crime but a preventive measure, just as patients with leprosy, tuberculosis or violent mental disorders are kept in institutions until such time as their illness is ameliorated so that they may be permitted to return to society. Sometimes a lifetime of isolation is necessary for the welfare of society at large.

Medicine, of which psychiatry is a major branch, should take the lead in demonstrating the wisdom of this new approach to crime. Psychiatrists in particular must devote themselves to a study of the emotional disorders which lead an individual to the state of criminality. They must establish, to the best of their abilities, criteria for determining when rehabilitation has been successful or when it is hopeless and lifetime detention is required. The history of past centuries has indicated that severity of punishment is, in itself, not a satisfactory preventive of crime. In the past one hundred years we have made great progress in transforming our prisons from torture chambers and dungeons to quasi-rehabilitative penal institutions. In all the long history of crime, punishment by incarceration has failed conspicuously to prevent the recidivism of the psychopathic criminal. The time has now arrived to further apply modern medical and legal knowledge, to the end that we may prevent the crime, rather than simply "punish" the criminal.

ORIGINAL ARTICLES

SELECTION OF CASES FOR MITRAL COMMISSUROTOMY*

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The present policy of the St. Michael's Hospital cardiac team regarding the choice of patients for mitral commissurotomy is outlined.

Surgery of acquired heart disease has made remarkable advances in the past five years.[1,2,3,4,5,6,7] Intracardiac surgical procedures have opened a fresh avenue for the treatment of structural mitral stenosis where medical management offers little but supportive care. The internist and cardiologist have been reluctant to follow the pace set by the surgeons for a number of reasons:

(1) Varying experiences with the natural history of the disease.
(2) Varying understanding of the aims and accomplishments of surgery.
(3) Initial contradictions in the indications and contraindications for surgery as given by different groups of investigators.

This communication is presented as a guide in the preliminary screening of patients with mitral stenosis. It is a summary of our views and observations over a number of years and is based upon the experience of our first one hundred operative cases. The operative results will be published in detail elsewhere.

Clinically detectable stenosis of the mitral valve appears after an indeterminate period following a variable number of acute—or undetected subacute—episodes of rheumatic carditis. Whatever may be the time or frequency relations involved in the appearance of mitral stenosis, once established, this lesion produces a number of modifications in the pulmonary circulation.

With progressive decrease in the size of the mitral orifice a point is reached when the left atrium cannot completely empty its contents into the left ventricle. Pressure within the former chamber rises. Eventually the atrium enlarges. This increase in pressure approaches two to three times the normal auricular pressure. A similar rise in tension results in the pulmonary veins. Consequent to the elevated pulmonary venous pressure the pulmonary arterial pressure rises to preserve the pressure gradient necessary to actuate the flow of blood through the arterioles and capillaries of the lung. Pulmonary arteriolar resistance, normally quite limited, may remain normal, but in most instances is increased. In some cases arteriolar pressure may be so elevated that more work is required to push the blood through the narrowed veins than through the stenotic valve. Catheterization studies have shown that at times the pulmonary arterial pressure is increased out of proportion to the rise in pulmonary venous pressure and may attain values equal to the systemic arterial pressure. The burden of sustaining such increases in pressure in the pulmonary circuit falls directly upon the right ventricle. Its diastolic pressure rises with progressive cardiac failure. The amount of blood ejected is normal in some patients, but as total resistance to flow increases, either due to pulmonary vascular or mitral valvular damage, the cardiac output declines. Further increase in pulmonary venous and ar-

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terial pressure occurs with the need for greater output under the stress of work; yet the ventricle is only capable of effecting increases in output that are small in proportion to the degree of exercise performed. In some patients exercise may cause a fall in output.

Signs and symptoms appear as a function of the pathologic changes in the heart and pulmonary vasculature. Dilatation and hypertrophy of the left and right auricles result in cardiac enlargement. Engorgement and hypertension of the pulmonary circuit result in enlarged pulmonary vessels with variable degrees of sclerosis. Congestion of the lungs leads to decreased vital capacity and contributes to dyspnea. Fatigue appears with diminished cardiac output. Hemoptysis may occur due to rupture of pulmonary capillaries, pulmonary edema or autochthonous infarcts. Pulmonary edema develops as a result of a marked rise in pulmonary capillary pressure when blood enters the pulmonary circuit but fails to leave it through the stenotic valve. Cough results from pulmonary congestion or, in some cases, encroachment upon the left main bronchus by the enlarged left atrium. Cerebral, visceral or peripheral embolism may occur from a fragment of a left atrial thrombus breaking free into the systemic circulation.

It is of extreme importance to realize that compensation may be so effective that a patient may have no, or minimal, symptoms even though the stenosis is far advanced. Such patients may, at any time, develop rapidly progressive symptoms and die in a short time.

Surgery aims at a direct attack upon the underlying obstruction to the flow of blood. It attempts to repair the stenotic mitral valve by surgically separating the anatomic leaflets. No valve tissue is removed. It endeavors, within the limits of the pathology present, to allow the thickened leaflets to open during ventricular diastole and appose each other during ventricular systole.

INDICATIONS FOR MITRAL COMMISSUROTOMY

There is a great difference of opinion among surgical groups as to what constitutes the proper selection of patients for mitral commissurotomy. One school feels that the ideal candidate for the operation is the patient with dynamically significant mitral stenosis who has as yet suffered no disability and who has none of the present contraindications to such surgery. That the lesion is dynamically significant is indicated by the presence of the typical murmur, a dilated left atrium and increased pulmonary vascular markings on fluoroscopy. Cardiac catheterization in these cases usually reveals a rise in pulmonary capillary pressure or a fall in cardiac output on exertion. If such a patient is subjected to surgery before clinical symptoms develop, the outlook is very good. To postpone surgery may spell disaster, because irreversible pathologic changes have already occurred when symptoms make their appearance.

A second school recommends that operation should be limited to patients whose symptoms are urgent. Their disability is progressive with increasing dyspnea on effort, easily provoked hemoptysis, chest pain and pulmonary edema. Their outlook with medical therapy alone is hazardous.

Between these extremes is the compromise view that the ideal group for surgery comprises those cases of dynamically significant mitral stenosis where early symptoms have made their appearance and progressive congestive heart failure has not developed. Our experience has led us to subscribe to this point of view. Operation, we feel sure, offers these patients an increased life span with relatively little risk. They are infinitely better able to withstand the procedure than are those for whom surgery is an urgent necessity. With a good surgical result they may be spared the discomfort and disability which would eventually appear were the stenosis allowed to go unrelieved.

The majority of patients now being referred for surgery unfortunately does not fall into this category. Most of our patients have had evidence of progressive or advanced heart failure. Although these cases are not as favorable risks as the former group, excellent results still may be obtained, provided there are no definite contraindications to surgery.

Auricular fibrillation is not a contraindication to surgery. Indeed, a large percentage of

patients with a normal sinus mechanism develop auricular fibrillation postoperatively, apparently without producing unfavorable results. We make no attempt to abolish auricular fibrillation with drugs either preoperatively or postoperatively.

A history of previous arterial embolism is not a contraindication to surgery. We believe such an event actually makes surgical intervention more urgent. The three to five per cent postoperative incidence of arterial embolism is more than overshadowed by the risk of allowing the disease to pursue its natural course. It is hoped that by relieving stasis in the atrium, and by excising the auricular appendage, the chance of future embolism may be considerably reduced.

The majority of cases of mitral stenosis show evidence of pulmonary hypertension on cardiac catheterization. However, we have had the experience of finding relatively normal pulmonary artery pressures on catheterization, despite the presence of a significant degree of anatomical stenosis of the mitral valve at surgery. Therefore, a normal pulmonary artery pressure does not contraindicate commissurotomy.

CONTRAINDICATIONS TO SURGERY

Active rheumatic fever. Active rheumatic fever is generally accepted as a definite contraindication to surgery. Rheumatic activity may be diagnosed with assurance only when overt rheumatic manifestations are present such as evidence of acute endocarditis, myocarditis or pericarditis. In the absence of these findings, subclinical rheumatic activity cannot be excluded clinically, since present laboratory procedures are not sufficiently accurate for this purpose. Histologic study of specimens of the left auricular appendage removed at operation reveals a high incidence of Aschoff bodies (about 25 to 30%) in cases thought to be inactive. The danger of reactivation of a dormant rheumatic state is always present and we have had several cases in which operation was followed by an exacerbation of acute rheumatic fever. It may be significant that all of these patients were in the 20 to 30 year age group, suggesting that rheumatic activity is more commonly seen in younger patients.

Several times we have been confronted with the problem of operating upon children with mitral stenosis. Such cases have been done in other institutions. We have had the opportunity of closely observing a large group of children with rheumatic heart disease because the New Jersey State Rheumatic Fever Clinic is held in our hospital. In our experience congestive heart failure due to mechanical obstruction at the mitral orifice has not occurred in the absence of active rheumatic fever in any child below the age of 15 years. Furthermore, in this age group there is a real possibility of future recurrent episodes of acute rheumatic activity with danger of restenosis of the mitral valve. Consequently we have refused to accept for commissurotomy patients below the age of 15 years. The youngest patient in our series of operative cases was 21 years of age and this patient suffered a flare-up of rheumatic activity postoperatively.

A study of the mortality among Metropolitan Life Insurance Company industrial policy holders during the period 1911 to 1949 shows that among children with evidence of heart damage during the rheumatic attack there was a survival rate of 71% a decade after the first observation. The proportion living through the 12th year was 78% of the original 71%. Thus there was a significant mortality rate in a two year span. Most of the deaths in this study resulted from recurrent attacks of rheumatic fever which accounted for about 85% of them. Also significant was the relatively high proportion of deaths from acute bacterial endocarditis and, more particularly, from the subacute form.

Subacute bacterial endocarditis. Subacute bacterial endocarditis must be considered a deterrent to surgical therapy. The risk of loosening a shower of infected material into the systemic circulation during surgery is great. Most cases of subacute bacterial endocarditis are amenable to antibiotic therapy and surgery should be postponed until the infection is completely eradicated.

Associated valvular lesions. Pure mitral stenosis is the ideal indication for commissurotomy. When mitral stenosis is complicated

by other left-sided valvular lesions of dynamic significance surgery is usually contraindicated. Between these two extremes lies the group of cases in which predominant mitral stenosis is associated with mitral insufficiency, aortic insufficiency or aortic stenosis which are of little or no significance at the time. In these cases worthwhile improvement following commissurotomy may be expected. Perhaps the majority of cases of mitral stenosis referred for surgery is found in this group, and the correct assessment of these cases is one of the most important responsibilities of the medical evaluating team.

a) Mitral insufficiency: Not infrequently, contrary to former teaching, pure mitral stenosis does occur. The technic of commissurotomy is based on the fundamental premise that the valvular stenosis may be corrected without producing insufficiency. In the presence of marked insufficiency preoperatively little or no benefit may be expected from relief of the stenosis unless the insufficiency can be corrected at the same time. However, in the presence of a slight degree of mitral insufficiency without dynamic significance excellent results may be anticipated. Indeed, in an occasional case in which slight insufficiency is present, following freeing of the commissures, valvular function improves and competency may be restored.

The preoperative diagnosis of mitral insufficiency can be extremely difficult. The presence of a systolic murmur at the apex in itself is insufficient evidence of mitral insufficiency since in some of these cases regurgitation cannot be demonstrated during surgical exploration of the left auricle. In other cases in which a systolic murmur was not audible, definite regurgitation was proved at operation.

The major criterion of the dynamic significance of mitral insufficiency is the presence of an enlarged left ventricle. The radiographic demonstration of an enlarged left ventricle in the presence of a co-existing right ventricular hypertrophy may be most difficult since the right ventricle may displace the left ventricle to the left and posteriorly. Important differential points are the dropping of the cardiac apex in the postero-anterior view and the position of the interventricular notch in the left anterior oblique view, along with obliteration or encroachment upon the cardio-spinal-diaphragmatic angle.

A minor degree of left ventricular enlargement in the presence of mitral insufficiency is not considered a contraindication to surgery. It must be emphasized that the left ventricle may become enlarged in cases of mitral stenosis without any organic valvular insufficiency when an active carditis is present. The only means of differentiating these two etiologic factors is repeated fluoroscopic examination, which, in cases of activity, will reveal significant variations in the size of the left ventricle within short periods of time if cardiac decompensation is not present. The assessment of the degree of left ventricular enlargement, therefore, requires judgment which can only be acquired by wide experience and repeated examinations. Such experience can be gained only by study and correlation of a large series of cases preoperatively, at operation and postoperatively.

Auxiliary aids in arriving at a decision as to the degree of insufficiency of the mitral valve are the size of the left auricle and the electrocardiographic pattern. A giant left auricle rarely occurs in pure mitral stenosis unless there is an associated high degree of insufficiency and the larger this chamber appears the more likely it is that significant mitral insufficiency is present. Theoretically, mitral regurgitation should cause systolic expansile pulsation of the left auricle, but in our hands this sign has not been of practical value. The electrocardiographic pattern is of considerable importance. We hesitate to accept a patient for surgery when the electrocardiogram does not show right axis deviation. Any case showing evidence of left ventricular hypertrophy electrocardiographically should not be submitted to surgery.

Intracardiac catheterization in our laboratory has not enabled us to demonstrate mitral regurgitation with any degree of accuracy.

b) Aortic insufficiency: Dynamically significant aortic insufficiency, documented by left ventricular enlargement, peripheral manifestations, and electrocardiographic evidence of left ventricular hypertrophy, constitutes a definite

contraindication to mitral commissurotomy. However, a slight degree of aortic insufficiency evidenced only by a blowing diastolic murmur without greater than minimal left ventricular enlargement, with a small arterial pulse pressure and right axis deviation in the electrocardiogram, in a patient with severe symptoms attributable to mitral stenosis, does not contraindicate surgery upon the mitral valve. Theoretically, enlarging the narrowed mitral orifice will allow a greater flow of blood into the left ventricle and therefore may tend to make aortic insufficiency worse. However, the patient may be relieved of his immediate symptoms and enjoy many years of fruitful life before progressive aortic insufficiency causes the left ventricle to fail.

In some cases in which a diastolic blow is heard to the left of the sternum, without other evidence of aortic insufficiency, the Graham-Steel murmur of pulmonary valve incompetency should be considered. However, in our series in every instance in which there was a diastolic murmur at the third left costrosternal space, this murmur persisted postoperatively and, therefore, should be considered of aortic origin.

c) Aortic stenosis: At the present time we are of the opinion that aortic stenosis is a definite contraindication to surgery. Patients with this lesion are notoriously poor risks for any type of surgery, let alone a major procedure upon the heart. Furthermore, correction of mitral stenosis without relief of constriction at the aortic orifice must of necessity place a greater burden upon the left ventricle. It is hoped that in the future technics may be developed which will allow a surgical attack on both the aortic and mitral valves at the same operation. Although such operations have been performed recently it is still too early to evaluate the results.

Marked cardiac enlargement. Marked cardiac enlargement is, as a rule, a contraindication to surgery since little benefit can be expected in those who survive the procedure. The myocardium is damaged to such an extent that even if the slight reserve it maintains is great enough to carry the patient through surgery, it is insufficient to allow significant lasting benefit. However, in an occasional patient in congestive failure the dilatation of the heart may be partially reversible. If vigorous therapy is successful in causing a considerable decrease in the size of the heart with improvement of symptoms, the patient may then fall into the group of acceptable risks.

A small number of patients with markedly enlarged hearts, in whom mitral stenosis is the chief cause of the difficulty, occasionally has responded to surgery in a satisfactory manner. Therefore, marked cardiac enlargement is not to be considered an absolute contraindication to surgery and each case must be evaluated on its own merits.

Intractable heart failure. Congestive heart failure which does not respond to optimal medical therapy is an obvious contraindication to surgery as experience has shown.

Poor emotional outlook. A poor emotional outlook on the part of the patient towards the operation should be considered a contraindication. Patients who are emotionally unstable and excessively apprehensive are, in our experience, definitely poor risks. We make it a rule never to attempt to urge the operation upon a reluctant patient. Ideally, psychiatric evaluation should be carried out on all patients.

Coexistent heart disease. The problem of operating upon patients with mitral stenosis above the age of fifty years has arisen several times. The oldest patient whom we accepted for surgery was 53 years of age. It must be kept in mind that the span of life has increased in recent years and it will probably be further prolonged in the future. Therefore, a patient in the older age group, who presents symptoms and signs of mitral stenosis which limit his activities and immediately endanger his life, should be considered for surgery. But in this age group coexistent hypertensive and coronary artery disease frequently occur and must be considered contraindications to surgery. Coexistent hyperthyroidism and syphilitic heart disease also contraindicate mitral valve commissurotomy.

Irreversible pulmonary vascular pathology. Irreversible pulmonary vascular pathology is a contraindication, unfortunately best evaluated by hindsight. There are those patients

who, in spite of a good surgical procedure, do poorly postoperatively, presumably due to pulmonary vascular changes. It has not been possible to identify these patients preoperatively to date, but one must always keep it in mind in long-standing mitral stenosis with clinical evidence of multiple pulmonary infarctions.

CONCLUSION

Mitral commissurotomy should be seriously considered as a therapeutic measure for patients with dynamically significant and symptomatic mitral stenosis.

The underlying physiology of mitral stenosis determining the rationale for such surgery is outlined.

It must not be forgotten that surgical repair of the deformed valve is but an adjunct in the care of the rheumatic cardiac. These patients may be restored to great activity, enjoying a more normal life, yet they must, for the immediate future, be considered as cardiac patients under the continued supervision of their physicians.

We have outlined in this paper our present policy with regard to indications for surgery in cases of mitral stenosis. However, our scientific objectives will encourage constant revision of these indications in the future in case new procedures and more conclusive long-term observations require modification of these indications. Time and continuous research will be the determining factors in this matter.

SUMMARY

Based on experiences with one hundred operated cases of mitral stenosis, the pathologic physiology and indications for surgical treatment are described. Mitral commissurotomy should be considered in those cases in which a dynamically significant mitral stenosis is present, providing there is no active rheumatic infection, subacute bacterial endocarditis, significant aortic valvular lesions, marked mitral insufficiency, marked cardiomegaly with extensive myocardial damage, emotional instability, intractable heart failure or associated hypertensive or coronary heart disease. History, physical examination, fluoroscopy, electrocardiography and cardiac catheterization are utilized in arriving at the conclusion regarding suitability for surgical intervention. Detailed discussion of the physiology, indications and contraindications is presented.

This work has been done with cooperation and assistance of the New Jersey State Department of Health, and we would like to thank Dr. Daniel Bergsma, State Commissioner of Health, and Dr. Marion R. Stanford, Director, Division of Chronic Illness Control, for their efforts in our behalf.

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MEDICAL DEGREES IN NEW JERSEY

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The Medical Society of New Jersey is unique in that it is empowered to grant medical degrees. Although this function has not been used in recent years, the history of medical degrees granted by our Society is of current interest.

Present interest in establishing a medical school for New Jersey directs attention to the likelihood of conferring medical degrees in this state in the near future. Although not widely known among its citizens The Medical Society of New Jersey possesses the authority to award the degree of Doctor of Medicine. This right, granted to our Medical Society over one hundred years ago, was exercised sporadically until the beginning of the present century. A review of medical degrees awarded to New Jersey physicians gains significance in view of recent efforts to institute professional medical education within our state.

On July 23, 1766, the first Medical Society in the American Colonies was founded in New Jersey. The title "Doctor" was generally applied to its members from the earliest days. One of the first names to appear in the minutes of the organization meeting was that of the Society's first president, "the Rev. *Mr.* McKean", (a clergyman-physician who held the academic degree of Master of Arts). Further on in the same meeting's records, however, McKean was referred to as the "Rev. *Dr.* McKean". This designation, "Doctor," was likewise applied to the other sixteen founding members of the Society. When the second meeting was convened on November 4, 1766, four candidates were proposed for membership in the Society—"Rev. *Mr.* Brown, *Mr.* Brown, Junior, *Doctor* Nathaniel Scudder, and *Doctor* Thomas Henderson". In subsequent sessions both Browns were also referred to as "Doctor". Following these first two meetings, the title "Doctor" has been the only one recorded in our Medical Society's minutes.

Two years after this pioneer body was founded in New Jersey, the first medical diplomas to be awarded after a course of study were granted in neighboring Pennsylvania at the initial medical commencement in America. On June 21, 1768, the degree Bachelor of Medicine was bestowed on ten candidates by the College of Philadelphia (later the University of Pennsylvania). Of these graduates, two were from New Jersey — Jonathan Elmer and John Lawrence — and each returned to his native state to practice.

An interesting anecdote concerning this commencement related its graduating class to Princeton College. Because of a faculty-student controversy shortly before graduation, the earliest medical diplomas in America came close to being awarded by the New Jersey college. Just before the commencement in Philadelphia, an argument arose as to who should have the honor of receiving the first medical diploma in the class. One member of the group was an Englishman; the rest were Americans. A majority of the faculty thought it would be a gracious gesture to the mother country to bestow the first diploma on the Englishman. This proposition was opposed by the American students who were zealously patriotic in behalf of their own country. They insisted that, should the faculty persist in this plan, they would demand certificates from the college attesting their completion of the medical course, and armed with these credentials, would request diplomas from nearby Princeton College. (The right to grant medical degrees was vested by royal charter in New Jersey's colonial colleges, Princeton and Rutgers.) This threatened withdrawal of most of the graduating class influenced the Philadelphia faculty to award its diplomas in alphabetical order. The first

medical degree was therefore conferred on John Archer, a native of Maryland.

The following historical note, recorded in the *Transactions of The Medical Society of New Jersey* for the Society's annual meeting held at Princeton in 1868, concerns Dr. Archer's graduation:

> Prof. H. C. Cameron exhibited the diploma of Dr. John Archer, A.M., M.B., a graduate of Nassau Hall (Princeton) in 1760. The Professor stated that this was the first medical diploma conferred in this country. It was given by the old Philadelphia Medical College in 1768 and was signed, among others, by Dr. Wm. Shippen, also a graduate of Nassau Hall. It was remarkable as being the degree of Bachelor of Medicine, instead of Doctor of Medicine, as is now customary. The A.B. of 1760 and A.M. of 1763 diplomas of Dr. Archer were also shown to the Society.

In New Jersey, Queen's College (later Rutgers) awarded three M.B. and four M.D. diplomas in 1792. (In the following year eight additional M.D. degrees were conferred.) This initiated the first of several incidents linking a medical school with what is now our state university. In spite of these early instances of awarding academic degrees, however, few American practitioners were graduates of medical colleges during the first half-century of our Medical Society's existence. The preceptor-apprentice system of training was more usual during this period. Alert to the necessity of formal medical instruction and proper recognition of such education by awarding medical degrees, The Medical Society of New Jersey adopted resolutions (recorded in the Society's *Transactions*) approving attempts to establish medical schools at both Princeton (1795) and Rutgers (1827).

For fifty years The Medical Society of New Jersey was the only organization of an authoritative nature in our state. It had no connection with any body above it or subsidiary to it, or with any teaching faculty that granted medical diplomas. At the regular meeting held on May 12, 1818, the desirability of conferring degrees through our Medical Society was expressed in the following resolution:

> Resolved, That Doctors Lewis Dunham, H. Van Derveer and A. R. Taylor be appointed a committee to devise some method by which the degree of *Medicinae Doctor* may be conferred on such gentlemen of the faculty of New Jersey as may be deemed worthy, and report at the next semi-annual meeting.

(The use of the term "faculty" to designate the members of The Medical Society of New Jersey was first recorded in the *Transactions* for 1769. To this day a similar title persists in the official name for the Medical Society of the State of Maryland, founded in 1789 as "The Medical and Chirurgical Faculty of Maryland".)

Dr. John Van Cleve, President of The Medical Society of New Jersey and a Trustee of Princeton College, in November, 1818, presented a proposal to the Board of Trustees of the latter institution concerning the possibility of effecting a degree-granting arrangement between the College and Medical Society. At the next meeting of our Society (November 10, 1818) the designated committee announced "some progress", but on May 11, 1819, it reported as follows:

> The Committee appointed to make application to the College of New Jersey (Princeton), relative to the conferring medical degrees, reported that the trustees of that institution did not think it expedient at this time.

Aware of the fact that New Jersey still had no medical college, its Medical Society subsequently applied to the State Legislature for authority to confer the M.D. degree. After considerable deliberation, a law was passed on November 24, 1825, granting this right. The "rules and regulations, for conferring the degree of Doctor of Medicine" were included in the *Transactions* recorded at the Society's meeting on May 9, 1826. They read as follows:

> First. The applicant for the degree of M.D. shall be a member of the medical society of the county where he shall reside, and shall have practiced physic for seven successive years with reputation, within the State of New Jersey.
>
> Second. The applicant shall produce satisfactory testimonials of moral character.
>
> Third. The applicant shall read before the Society a dissertation on some medical or philosophical subject; and, if after a competent examination before the Society, by a committee appointed for that purpose, he shall be approved, they shall recommend him to the Society for a degree.
>
> Fourth. The applicant shall then be balloted for by the Society, and admitted to a degree, provided he shall receive the approving votes of three-fourths of the members present.
>
> Fifth. The applicant shall then be entitled to

a diploma, signed by the President and all the fellows (ex-presidents) present, for which he shall pay $15, for the use of the Society.

Sixth. The honourary degree of M.D. may be conferred without the above-mentioned formalities, when recommended by the Standing Committee (corresponding to the present Board of Trustees) of The Medical Society of New Jersey, and approved by three-fourths of the members present.

Seventh. That all applications for degrees shall be made at some previous meeting of the Society, but the degree only to be conferred at the annual meeting.

This degree-granting authority was first exercised at the Society's meeting on May 10, 1831. At that time the honorary degree of M.D. was conferred upon Dr. Augustus R. Taylor of Somerset County (President of the State Society in 1822 and 1830). At the same sessions, Dr. Peter Vredenburgh, Secretary of the Society, was nominated for the same award but declined the honor.

It was evidently expected that the M.D. degree would be popular among physicians of New Jersey, and frequently sought. Such, however, did not prove to be the case. Only eleven instances in which the degree was awarded were recorded in the *Transactions* during the next twenty-five years. The members of the Society who received these diplomas, nevertheless, were outstanding in the profession. The following M.D. recipients appear in the Society's minutes from 1833 through 1856:

May 1, 1833—Jeptha B. Munn, Morris County (President, 1828).
William D. McKissack, Somerset County (President, 1826).

May 10, 1836—John W. Craig, Somerset County (President, 1829).

May 8, 1838—Samuel Hays, Essex County (President, 1834).

May 14, 1850—John Bowne, Hunterdon County; Nathan W. Condit, Morris County; Jacob T. B. Skillman, Middlesex County (President, 1847).

January 24, 1854—Charles L. Pearson, Mercer County.

January 22, 1856—John Blane, Hunterdon County (President, 1861).

Legislation passed during the middle of the last century (coincident to the rise of new medical schools, and the founding of the American Medical Association in 1847) may explain the relatively few degrees issued by The Medical Society of New Jersey during this period. In 1851, for example, a state law exempted graduates of five medical schools in New York City and Philadelphia from examination for license to practice in New Jersey. (This licensing privilege was previously administered by a Board of Censors appointed by the Medical Society). Three years later, in 1854, another statute was passed admitting to practice without examination all graduates of medical colleges affiliated with the American Medical Association.

In effect, therefore, academic diplomas, often obtained with little effort at that time, supplanted the licensing power formerly vested in the state medical society. (Laws dating back to 1772 had required an examination in order to obtain a license to practice medicine and surgery in New Jersey. Academic degrees were not required, however, in those early years. It was not until 1894 that our State Board of Medical Examiners was granted the exclusive right to license applicants for practice in this state.)

In 1864 a revised charter was obtained by The Medical Society of New Jersey. This document preserved the Society's right to award the M.D. degree to applicants who exhibited "sufficient evidence as a regularly educated and qualified practitioner of the healing art". In addition to earlier requirements, an applicant now had to attend two courses of lectures at an approved medical school in order to qualify for the degree. The form of the ornate Latin diploma granting the title of *Doctoris Medicinae Chirurgioeque (Societas Medica Reipublicae Neo-Caesariensis)* was included in the articles of this new charter.

Speaking before the Centennial Meeting assembled at the Rutgers College Chapel on January 23, 1866, Dr. William Pierson, Jr. urged the Society to award the M.D. diploma to deserving medical apprentices in New Jersey. By granting this degree, he stated, "We place our students upon an equal footing with those of other states, favored with Medical Colleges; and maintain, by a judicious method of conferring the degree, the standard of qualification for membership and practice". In addition, Dr. Pierson warned that "the blame

will be ours, if we neglect to recommend our students to The Medical Society of New Jersey for an M.D. It will cost less, and confer value and honor comparable, to that obtained from any other source".

This degree-awarding prerogative was not employed again, however, until six years later. On May 29, 1872, an honorary diploma was presented to Dr. William Pierson, Sr. of Essex County (father of the Centennial speaker and President of the Society in 1869). Again on April 8, 1881, the M.D. degree was awarded, after examination, to Charles Vogler of Essex County. His doctoral thesis was on the subject of myelitis. Two years later, on June 12, 1883, P. N. Jacobus of Sussex County also fulfilled the requirements for the Society's diploma.

During the next fifteen years, "The Committee on Honorary Membership and Degree of Doctor of Medicine" reported each year that no nominations had been proposed for the latter award. On June 28, 1898, the last honorary M.D. degree was conferred on Samuel Hayes Pennington of Essex County (a Society member for fifty years and its President in 1848). After 1900 the title and duty of the above-named committee was shortened to include only honorary membership as its province. The Society's practice of awarding an M.D. degree, either honorary or after examination, had already fallen into disuse by this time.

With the recent revival of interest in founding a medical school for New Jersey, the historical authority to grant the degree of *Medicinae Doctor* might have potential value. Chapter XIV of the present By-Laws to the Constitution of The Medical Society of New Jersey is still entitled *Conferring the Degree of Doctor of Medicine*. Although the title of this section mentions the awarding of a *degree,* the form of the certificate to be issued under its provisions is but a recommendation to the President of the Medical Society that the applicant should receive a *license* "to practice physic and surgery". (The licensing of physicians in New Jersey is now, however, the exclusive right of the State Board of Medical Examiners, rather than the Medical Society itself.)

Last year (1952) Chapter XIV mentioned above, was listed as a proposed deletion from the By-Laws of the Society's Constitution. This proposed deletion was included in the Board of Trustees' Annual Report to the House of Delegates, published in THE JOURNAL of The Medical Society of New Jersey for May of 1952. The right to confer the M.D. degree, as given to the Society in 1825 and retained in its amended charter of 1864, is now admittedly an archaic form according to law and usage. The Act of 1894, setting up a State Board of Medical Examiners, and requiring all who seek a medical license to be examined by this Board, repeals by implication, at least, the authority vested earlier in the Medical Society. Whether this body is empowered to grant a degree appears only of academic interest as all applicants now possess medical diplomas from institutions outside of New Jersey. Chapter XIV has been retained in the Society's Constitution to date, however, if only for its potential importance should the occassion arise to utilize this old degree-granting privilege. Many persons today hope that the awarding of a Doctor of Medicine degree through The Medical Society of New Jersey (perhaps in affiliation with our State University) will become a reality in the not-too-distant future.

Donnelly Memorial Hospitals

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INFARCTION OF THE LIVER DUE TO POLYARTERITIS NODOSA

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Polyarteritis nodosa is considered one of the more unusual "collagen" diseases. Associated infarction of the liver is a rare manifestation. The authors relate the clinical course of this condition, with necrospy findings.

Liver infarction is rare [1,2,3] and usually the result of portal vein thrombosis. We have recently encountered liver infarction due to polyarteritis nodosa lesions in the hepatic arteries. Although branches of the hepatic artery are frequently involved in polyarteritis nodosa, (11 of 17 cases of Griffith and Vural [1]) resulting infarction is unusual because of a double blood supply. Infarction due to the lesions of polyarteritis nodosa has been observed in other organs: heart, kidneys, gall bladder, spleen and intestines.[1,4,5,6]

Only two proved cases of polyarteritis nodosa in a series of 5000 autopsies have been seen at the Jersey City Medical Center during the past twenty years. In neither case could a definite diagnosis be made from biopsied tissue. The diagnosis of polyarteritis is made on the basis of involvement of the muscular type small and medium sized arteries, the marked medial layer destruction, multiple organ involvement, and a history of clinical symptoms for several months to a year or more. The following case was clinically recognized as polyarteritis nodosa but lymph node and muscle biopsies were negative.

CASE REPORT

L. F., a 39-year old white electrician, entered the Jersey City Medical Center for the first time on April 23, 1952, complaining of joint pain of 10 weeks' duration.

During the past 18 months the patient had felt excessively tired but did not consult his physician until 2 weeks after he developed anorexia, weight loss, fever, and right shoulder pain which quickly migrated to the opposite shoulder, knees, and ankles. He was placed on high dosages of salicylates for one week without relief of pain or fever and was then begun on cortisone, 100 mg. orally each day. There was prompt relief of pain and fever with the start of cortisone therapy but during the administration of the second gram the joint pain returned together with dull generalized abdominal pain, fever up to 103 degrees, and swelling of both ankles. At this time he was hospitalized.

The past history included mumps, measles, whooping cough, Bright's disease, and "Spanish flu." He had been treated 20 years previously for gonorrhea. While serving in World War II he had been stationed in the Pacific Area. Systemic review disclosed a non-productive cough and rhinorrhea of 3 days' duration. Both parents had died of cancer of unknown type.

Physical examination showed a poorly nourished white male in no acute distress. The temperature was 100.8 degrees, respirations 24, pulse 92, and the blood pressure 118/90. There was injection of the throat and moderate venous congestion of the neck. The heart and lungs were normal. The smooth edge of a non-tender liver could be palpated 3 centimeters below the right costal margin. The anterior tibial surfaces were slightly tender. There was no edema and reflexes were normal.

During the first week of hospitalization the patient's temperature ranged from 99.6 to 102.0 degrees while receiving 0.6 gram of aspirin every 4 hours. The joint and abdominal pains continued and his appetite remained poor. Repeated urinalyses showed 2 plus albuminuria, occasional hyaline casts, a few white cells and rare red cells. By the second week the patient's temperature varied between 99.0 and 100.0 degrees. A Fishberg concentration test showed maximum urine concentration of 1.015. The total serum protein was 5.8 gm., blood NPN 27 mg., blood sugar 97 mg., and the blood uric acid 2.0 mg. per hundred cc. The hematocrit was 43 and the white count 9,150. A first strength tuberculin test and Wassermann test were negative. On May 6, 1952, the patient refused further treatment and left the hospital.

At home the patient received no medication. He became progressively weaker, his joint pains worsened, his fever persisted and 4 weeks later he was readmitted. His temperature was 100.2 degrees, pulse 90, respiration 26, and blood pressure 140/86. There was tenderness throughout the soft abdomen, especially in the epigastrium, but no masses could be felt. Non-tender, firm, discrete, small nodes were present in the neck, axillae, and inguinal areas. The chest was clear to auscultation and percussion. There were rare red blood cells present in the otherwise normal urine. The red blood count was 3,900,000, hemoglobin 11.5 grams, platelets 266,000, white blood count 12,850, and the differential was: stabs 2%, segmented neutrophiles 75%, lymphocytes 14%,

and eosinophiles 5%. The blood non-protein nitrogen was 30 mg. and the sugar 110 mg. per hundred cc. and routine agglutination tests were negative.

During the first week after readmission the patient had daily temperature elevations from 100.4 to 103.4 degrees, and he was never afebrile. He again received 0.6 gram of aspirin every 4 hours. Roentgenologic examination of the chest revealed a density in the right hilar region which was believed to be vascular or glandular. The electrocardiogram was normal as was a gastrointestinal series. Tuberculin and brucellergin skin tests and several blood cultures were negative.

Morning temperature peaks to 103.0 degrees occurred throughout the second hospital week. On the tenth hospital day he was begun on Terramycin®, 500 mg. every 6 hours, without subsequent change in his clinical course.

The lymph nodes noted on the admission physical examination became more tender and larger during the third week. A biopsy of an axillary node was interpreted as chronic lymphadenitis. The patient's fever remained unaltered and on June 23 the Terramycin® was discontinued. The white blood count increased to 14,600 with 7% stabs, 75% segmented cells, and 18% lymphocytes.

At the beginning of the fourth week he received 20 mg. of ACTH intravenously. Within 18 hours his temperature dropped from 101.0 to 96.8 degrees; by the following day sensation in his lower extremities had improved along with increased ability to move his right foot. He was placed on a low sodium diet. Following a rise in temperature to 100.6 degrees, after receiving no ACTH for 3 days, the patient was placed on 20 mg. of ACTH intramuscularly twice a day and again there was a rapid drop in temperature to 98.0 degrees. There was no accompanying subjective improvement.

The temperature ranged between 97.0 and 99.4 degrees during the fifth week with the continued administration of ACTH. On July 7 the left quadriceps muscle was biopsied and diagnosed as normal skeletal muscle. At this time his red blood count had risen to 4,400,000 with 13.0 grams of hemoglobin.

By the sixth week the patient had become extremely cachectic and complained of severe abdominal and leg pain.

ACTH was discontinued after the temperature had returned to levels of 101.0 to 102.0 degrees and the patient was begun on streptomycin, 0.5 gram four times a day plus penicillin, 400,000 units twice a day. There was no change in the fever pattern with the use of these drugs. A second roentgenologic examination of the chest, when compared with the plate taken 6 weeks previously, revealed a marked change. At this time there was a diffuse bronchopneumonia extending from both hilar areas to the periphery with greater involvement on the right side. The pleura at the base of the right upper lobe was thickened. The dense shadow described in the right hilum in the previous report was again noted. It was the radiologist's opinion that it may have represented the breakdown of a tuberculous gland with bronchopneumonic spread. Sputum examinations for acid fast bacilli were negative. A second electrocardiogram was normal.

Streptomycin and penicillin were discontinued at the beginning of the eighth week. At this time the patient was having frequent cyanotic episodes, there were rales in both lung fields, the liver was enlarged, smooth and tender, there was 2 plus pedal edema, and tachycardia. The patient was digitalized, given aminophyllin and Thiomerin®. Terminally, he developed a gallop rhythm and expired on July 30, 1952, 2 months after his second admission.

At postmortem examination, 6 hours after death, the following were the significant pathologic findings:

The body was markedly emaciated. Small, firm, discrete axillary, inguinal, and supraclavicular nodes were present. There was no edema. 250 cc. and 450 cc. of clear, straw colored fluid were found in the right and left pleural cavities respectively. The heart weighed 500 grams and there was moderate hypertrophy of the left ventricle. The endocardium was smooth and the valvular orifices were of average size. The right lung weighed 700 grams and the left 500 grams. The smooth external surfaces of both lungs were mottled dark red and yellowish grey. All lobes were hypocrepitant and slightly granular on section. There were numerous patchy dark red areas from which moderate amounts of frothy red fluid could be expressed. The bronchi contained brown viscous fluid. Each kidney weighed 150 grams. The renal capsules stripped with difficulty from pale, granular surfaces. Each cortex measured 0.4 cm. and the medulla 1.4 cm. The pelves were of average size. The liver weighed 1600 grams and the spleen 500 grams. The biliary and gastrointestinal systems appeared normal.

The microscopic pathology was most striking in the muscular arteries of the kidney and the liver. The most common finding was occlusion of the lu-

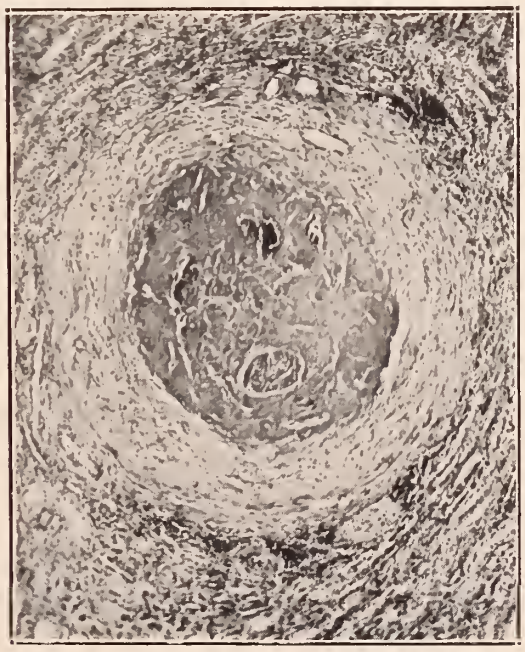


Figure 1. Polyarteritis in kidney, subacute stage, with central old thrombus and inflammation of the media.



Figure 2. Polyarteritis in kidney, partial healing.

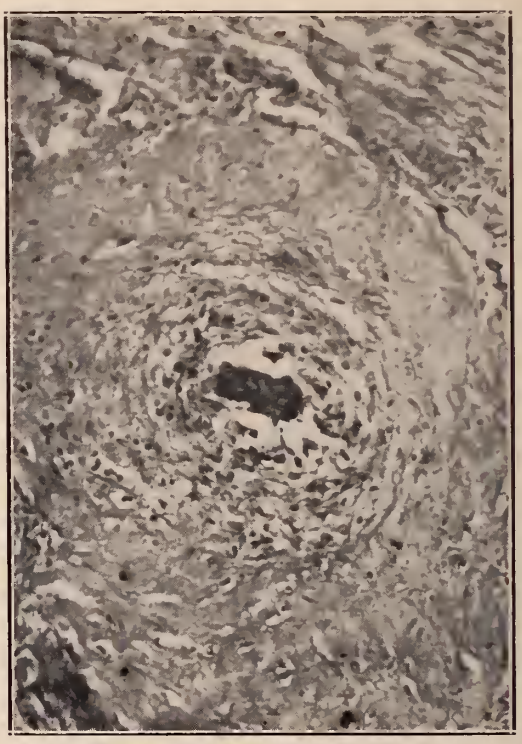


Figure 3. Polyarteritis in liver.

mina by old thrombi and hyalinization of the media with lymphocytic infiltration (figure 1). Associated with this older arterial lesion was a round area of ischemic kidney infarction which had margins of fibrous tissue. Other renal arteries had a chronic or healed lesion (figure 2) characterized by focal inflammation of the media and almost complete obliteration of the lumen by fibrous tissue with a loose lymphocytic infiltration. Other subacute lesions (figure 3) with thrombosis, inflammation of the intima, and hyalinization of the media were present in the liver. This organ also contained medium sized arteries with classical deeply acidophilic necrosis of the media. The liver parenchyma adjacent to the arterial lesions was infarcted and contained deeply acidophilic necrosis of the lobules with peripheral margins of polymorphonuclear infiltration. The pancreas contained similar arterial lesions associated with large interstitial foci of foamy macrophages. In areas without these vascular lesions, the kidney, the liver, and the pancreas had a normal histology. The lungs contained an organizing bronchopneumonia. The anatomic diagnoses were: polyarteritis nodosa, subacute stage with evidence of healing; multiple infarcts of the liver and kidneys; and bronchopneumonia.

SUMMARY

1. An unusual case of polyarteritis nodosa with infarction of the liver has been presented.

2. The total clinical course was six months. Intermittent cortisone and ACTH treatment seemed to have prolonged the course slightly and to have caused some healing of the arterial lesions.

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ASTHMA IN THE FIRST YEAR OF LIFE*

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Based on a large experience in managing infants with asthma, the author summarizes the diagnosis and treatment of this troublesome disorder, and presents a logical approach to the problem.

Asthma frequently begins before the age of one. Bray,[1] using the published figures of many authors including his own, stated that in cases of asthma starting in the first decade of life, 22 per cent begin in the first year. In 250 cases of asthma before the age of 13 seen in my practice, 19 per cent began before the age of one.

The importance of asthma at this age is more clearly shown when we compare the age of onset of severe cases with that of the less severe. An analysis was made of 250 patients with asthma under 13 years of age; the average age of onset was 3 years. Of these, the 36 most severe cases showed an average age of 1.8 years at the beginning of the condition. We must admit that it is often difficult to say just when asthma does begin, and that the numbers involved here are very small. Even so, it appears that asthma which begins in infancy is more likely to be severe than when it begins later.

This paper is based on the records of 30 asthmatic patients first seen before the age of one in private practice.

The allergic family history of these babies is very marked. Taking into consideration only asthma and hay fever in parents, uncles, aunts, and siblings, 5 had a family history of allergy from both sides, 14 had it appearing in one side or in a sibling, and 11 had no such allergy in the family.

The diagnosis is made by the signs in the chest, the existence of known allergies in the patient or his family, the presence of positive skin tests, eosinophiles in the blood, sputum, or nasal discharge, and by the absence of other causes for the dyspnea.

All dyspnea is not asthma. Even if a patient has some signs of allergy, it is still our responsibility to rule out other causes of respiratory difficulty. Such causes may be listed as follows:

1. Respiratory infections including croup, bronchitis, bronchiolitis and pneumonia.
2. Foreign body in the respiratory passage.
3. A mass pressing on the air passage from outside such as a lymph gland, tumor, thymus or aortic ring.
4. Congenital malformation of the respiratory tract including laryngeal stridor.
5. Fibrocystic disease of the pancreas (mucoviscoidosis) with bronchiectasis.
6. Cardiac disease, usually rheumatic or congenital.

We do not want to overburden the patient with unnecessary investigation. In ruling out other disease there should be an x-ray of the chest. Further special investigation is done when there are signs or symptoms to suggest other disease, especially constant wheezing which cannot be relieved.

The difficulty in diagnosis is enhanced by the fact that these babies do not always wheeze with musical sounds and prolonged expiration. Sometimes the dyspnea is accompanied by noisy rattling breathing in which the noises obviously come from the trachea and larger bronchi, and the stethoscope picks up nothing but the coarse tracheal rales.

Among those conditions to be considered in differential diagnosis the greatest difficulty is with respiratory infections. The baby may have a great deal of difficulty in breathing with bronchitis, bronchiolitis, or pneumonia, with no allergy involved. On the other hand an asthmatic baby with an upper respiratory infection may sniffle and cough and have some dyspnea without any definite wheezing. More often than not we fail to get any help from

* Read before the Allergy Section of The Medical Society of New Jersey, May 19, 1953.

the laboratory, the smears from the mucus in the throat usually show no eosinophiles, and usually the blood eosinophiles are not increased. The skin tests are likely to be negative or doubtful.

When the baby has a respiratory infection with some wheezing or dyspnea, and when this has been repeated or tends to continue, the condition is likely to be asthma. In this situation it is sometimes impossible to make a positive diagnosis, and the best course may be to consider that the baby probably has asthma, and to act accordingly until a more definitive diagnosis can be made.

There is a great deal of dispute about the specific cause or causes of wheezing in babies. It is maintained by some that bacterial allergy is specially important at this period and is the most frequent cause. In this series it is clear that in the more severe cases the causes are multiple; that these babies are allergic to foods, inhalants and infection. Each severe case may have many allergies, several of which are definitely demonstrable.

With the milder cases, these multiple allergies may not be detected. Many of these babies have no significant positive skin tests, and wheeze only when they have a respiratory infection. One gets the impression, however, that the milder cases are like the severe ones but to a lesser degree; that they have many allergies which are milder and less evident, partly because positive skin tests are so few and small at this age, and partly because the patients do so well that multiple allergies are not discovered.

In specific diagnosis certain points of the history are of special importance in infancy. If the symptoms begin early, during the first three months when the baby is on a milk formula and getting little or no other food, milk allergy is to be suspected. These babies usually have some colic, discomfort, or vomiting in addition to, or preceding the respiratory symptoms. On the other hand in many babies with colic, vomiting and early occurrence of wheezing milk allergy cannot be shown. The other foods that the baby is getting should also receive attention; wheat, orange juice, and egg are common food allergies in the first year.

There are certain indications that environment is important with these patients. Almost invariably they clear rapidly in the hospital, more rapidly than they do in the home, even with the best care and the same medication. One baby with entirely negative skin tests stopped wheezing in the hospital in two days without any medication, and began again a few hours after going home. Another with negative skin tests stopped immediately after removal of stuffed animals from the bed.

Skin testing in babies is much less satisfactory than in older children. Seven babies were tested by the scratch method before 6 months of age. Of these, four were entirely negative, two had several very small tests of doubtful significance, and one had a fairly good test to Penicillium. It seems clear that skin testing in asthma in the first 6 months of life is not helpful in determining the specific cause. One might theorize that the production of reagins, like the production of immune antibodies, is not rapid at this age; at any rate the skin shows few positive tests and these are mostly very small. These babies usually do, however, have clinical inhalant and food allergies.

After six months of age, the skin tests are a little more like those of older children. In 23 babies between 6 and 12 months of age, only three had entirely negative skin tests, eight had tests recorded as two plus. However, in only six cases were these tests helpful in the specific diagnosis.

From this it is concluded that it is usually better to postpone skin testing until after the sixth month of life. From then on the tests are chiefly helpful in confirming the diagnosis of asthma, not in determining the specific cause. After one year of age the tests become valuable.

The tests referred to above are scratch tests only. I have not done many intracutaneous tests in babies. It is known, however, that many more positive tests may be obtained by this method.

I prefer the scratch tests as a routine. They are simpler, faster, and can be readily done on a baby without much disturbance. Although less sensitive, the positive tests are more likely to be significant.

The number of tests to be done can be made the subject of much argument. I do 36 on a baby; if I were not keeping statistics I would be satisfied with less. The list below covers the necessary tests for a baby:

Cat	Beef	Beets
Dog	Lamb	Lima beans
Timothy	Potato	Oats
Ragweed	Orange	Alternaria
Wheat	Tomato	Hormodendron
Milk	Salmon	Penicillium
Egg	Spinach	Aspergillus
Chicken	String beans	House dust

The specific diagnosis of allergies in asthma at this age is largely one of trial and error in the course of treatment, and dietary experiment is part of this diagnosis. Aside from the question of milk, all the other articles of the initial diet should be those which are least likely to give reactions and also which are different from the normal diet. For cereals, barley and rice may be given; for fruit juices and fruits, stewed pears, apricots, and prunes; for vegetables, beets, carrots, and sweet potato; for vitamins, ascorbic acid, and synthetic vitamin D. For milk we can use a soy bean preparation or boiled evaporated milk. The soy bean is preferable for the test diet; evaporated milk is often good for the final diet. When soy bean milk is not tolerated, a meat milk can be substituted.

After the baby has been on this diet for a week, and preferably after his asthma has subsided, regular foods may be added one by one. No food is added at this time to which the baby is probably sensitive. Except for any probable offender, foods are added one at a time at four day intervals: milk, wheat, orange juice, chicken, beef, lamb, and vegetables. The new food should be given in good quantity and daily; usually symptoms will appear within 24 hours if the food is a source of sensitivity. If no symptoms appear, that food is allowable in the future and we try the next one on the list.

If a baby is having severe asthma, it is sometimes best to have him in the hospital, get him quieted down, and have him on milk and wheat before sending him home. The symptoms produced by milk or wheat are more easily controlled in the hospital.

Some of the best students of allergy believe that infection is the principal cause of asthma in most of these babies. It is wise to consider carefully the question of foci of infection. Hypertrophied adenoids may be important. Fever, leucocytosis, and purulent discharge without eosinophiles in the secretions favor infection. At this age blood eosinophilia is not usually present.

Inhalant allergy in infants is usually not easy to demonstrate. The skin tests are very unsatisfactory. With the 30 babies under 1 year of age only one gave a positive scratch test to dust, and he was obviously very sensitive to the dust of his home. Several others improved strikingly when measures were taken to reduce the amount of house dust around them.

Recently a baby was taken to the hospital where he stopped wheezing without treatment and on returning home he again wheezed a little. Another baby, 9 months old, was sent to the hospital wheezing severely. She cleared up, returned home, and was back in the hospital in 2 days in moderate asthma. We have to find out as much as we can about the inhalant allergies by history, skin tests and trials.

CASE REPORTS

No. 1. J. B., an 8-month old white male, was seen with nasal congestion and dyspnea since the age of 3 weeks. These had become progressively worse. The infant's maternal aunt had eczema.

General physical examination was negative, including the nose, throat, and lungs. Scratch tests showed a 1+ reaction to cat, dust, wheat, egg, spinach, and potato. Clinically, however, dust, egg, wheat, spinach, and potato produced wheezing and he was found to vomit cod liver oil, potato, beets, and orange juice.

The patient's family was instructed to avoid house dust and the foods that upset the child. He was desensitized with house dust extract.

There was progressive improvement until he was 5 with only occasional asthma attacks associated with colds or errors in diet. When last seen at age 9 he had been free of respiratory difficulties for 4 years.

No. 2. G. S., a 7-month old white female, was well until 4 months of age when she developed wheezing respirations and 3 attacks of severe dyspnea requiring oxygen. At the time she was first seen she had begun to vomit a great deal.

Physical examination was unremarkable except for wheezes in the lungs with a prolonged musical expiratory phase. At 7 months scratch tests were positive for penicillium, chicken, and spinach. At 2 years they were positive for only cottonseed and cornmeal. Egg, wheat, and milk made her cough.

Orange juice, egg, lamb, lima bean, spinach, and potato made her vomit. Penicillin brought on asthma.

She was treated with a diet excluding the foods mentioned above, and with goat's milk. She was protected from exposure to house dust and desensitized for dust.

At the age of five and one-half she had been free of symptoms for a year and was able to take egg, cow's milk, and wheat.

The next 3 tables show the positive scratch tests and their relationship to clinical sensitivity. It should be recognized that the relationship shown is only what could be found in the records of patients being treated in the regular way. In some cases the patients were doing well and no great effort was made to demonstrate food allergies. In other cases, for instance with egg sensitivity, this was not demonstrated because it was inadvisable to bring on an attack.

TABLE 1

POSITIVE SCRATCH TESTS AT FIRST TESTING (30 Patients)

Spinach	10	Ragweed	2
Egg	7	Chicken	2
Aspergillus	6	Wheat	1
Alternaria	5	Milk	1
Penicillium	5	Cat	1
Hormodendron	4	Dog	1
Timothy	4	Cotton	1
Potato	4	Orris	1
Tomato	4	Silk	1
String bean	3	Dust	1
Orange	3	Beef	1
Salmon	3	Peas	1
		Mustard	1

There was only 1 positive test to house dust (Table 1) and this was in a patient clinically exquisitely sensitive to house dust. This would suggest that with house dust, the clinical sensitivity antedates the skin sensitivity.

TABLE 2

	Positive Scratch Tests To Foods	Positive Scratch Tests Confirmed By Clinical Trial
Spinach	10	2
Egg	7	3
Potato	4	1
Tomato	4	0
Orange	3	3
String bean	3	0
Salmon	3	0
Chicken	2	0
Wheat	1	1
Milk	1	1
Beef	1	0
Peas	1	0
Mustard	1	0

Only 3 of the positive egg cases (Table 2) were confirmed by clinical tests. This was because we did not try the clinical test for egg, fearing a serious reaction. Wheat and milk each gave one positive scratch test and this was confirmed by clinical test. Three positive scratch tests to orange were all shown to be significant. Positive tests to spinach, potato, string bean, fish, chicken, lamb and peas, were all probably of no importance except one of the positive potato tests.

TABLE 3

	Positive Clinical Tests To Foods	Positive Clinical Tests Accompanied By Positive Scratch Tests
Orange	11	3
Egg	6	3
Wheat	4	1
Spinach	3	1
Milk	2	1
Beets	2	0
Potato	2	1
Fish	1	0
Beef	1	0
Lamb	1	0
Lima bean	1	0
Oats	1	0

If as criteria we include vomiting, eczema or wheezing, orange (Table 3) gave many more positive clinical tests than scratch tests. Wheat and milk also gave more clinical tests than scratch tests. At this age, orange and egg are important trouble makers, but the mother usually recognizes this allergy herself. Milk and wheat are less common sensitizers, but are more difficult to diagnose.

Treatment often starts during an attack. If the situation is at all serious, the hospital is the best place for the baby. Here the change of environment, the facilities for preventing dehydration and administering medication accelerate recovery.

In babies the infectious element is more prominent than in later life. In general babies do not have status asthmaticus comparable to the condition in adults; an asthmatic condition which does not readily yield to adrenalin is caused by infection and quiets down as the infection improves. If the attack is at all severe, the infant usually has an infectious process involving the lower respiratory tract. Even if this is not demonstrated an antibiotic

is indicated, usually penicillin given by injection, 300,000 units once a day. If the situation is critical or serious it is probably wise to give sulfonamides also or to substitute Terramycin® until the bacteriology and sensitivity of the infecting organism is known.

Epinephrine is the drug of choice for an asthmatic attack. Babies and little children take about the same dose as older children and adults; 0.15 cc. or 0.2 cc. seems to be a satisfactory dose, and this may be repeated after 15 minutes. If relief is gained by this means, an injection may then be given of slowly absorbed epinephrine such as the suspension called Susfrine®. It is not wise to continue giving epinephrine when it does not give relief.

If epinephrine fails, aminophyllin should be given; often this seems to be the drug of choice for hospital use; 0.12 gram is effective given in slow intravenous infusion of 500 cc. of 5 per cent dextrose and saline.

Severe cases must be kept well hydrated. When a baby is in difficulty with asthma he tends to get dehydrated, and if this process goes too far it may lead to thickening of the bronchial secretions, with exhaustion and possible death. When a baby is beginning to be dehydrated the beneficial effect of intravenous dextrose solution is startling; this makes it of vital importance to get a baby with severe asthma to the hospital unless he can be relieved promptly at home.

The oxygen tent is of value in severe asthma even in the absence of visible cyanosis. I have had no experience with bronchoscopy as a form of treatment for babies. I should think that it would rarely be useful; with a very sick baby, bronchoscopy might be too severe a shock. If the dyspnea is severe, ipecac, 1 teaspoonful, to induce vomiting as advocated by Ratner would be advisable if the baby has not already vomited.

I have not used cortisone in a baby with asthma. It seems clear, however, that cortisone is an excellent remedy for asthmatic attacks in older children, and also it has been used successfully in infancy for eczema. In asthma at this age, infection plays an important part and for this reason cortisone will probably not be as useful as in the school age group.

Only a few remedies have been mentioned. It is well to become familiar with the action and dosage of a few drugs. One gets the impression that these babies when severely ill do best in the hospital, given plenty of fluids, penicillin and minimal other medication.

The chief problem is the long term treatment to reduce and prevent the development of asthma. To do this it is best to assume that the baby has many allergies, inhalant and food, and that infections are an important factor in the condition.

We have already by history and skin test done what we could to find out what inhalants play a part in the symptoms of the individual patient. If we have evidence that any particular inhalant is incriminated, special pains are taken to keep that one out of the baby's environment. Often we do not have any such evidence and we must try to protect the baby from contact with the more common offenders.

Usually the baby is already on a water-proof mattress which is also dust proof and usually the baby has no pillow. Woolen blankets are not allowed; as in eczema, wool is one of the principal harmful agents. Cotton blankets and if necessary, a well washed cotton quilt make good bedding. No stuffed or hairy toys are allowed. The whole room should be as bare and clean as possible with no wool in the room or closet.

Outside of his room the baby should not be placed on a woolen rug or on stuffed furniture. Preferably there should be no animals in the house, and plants are bad for asthmatics. It should be noticed whether taking the baby into other houses makes him worse, and, if so, this is not done; if a baby is having trouble during a pollen season the windows in his room should be closed.

When the final diet is decided on it should be as complete as possible, and no food should be eliminated unless there is good reason to believe that it is harmful.

The infectious element plays a large part in this disease; not uncommonly the attacks seem to occur with and only with respiratory infections. Occasionally these babies have large infected adenoids that need to be removed. It is best to use antibiotics promptly at the be-

ginning of an infection, usually either Terramycin® or penicillin. An allergic reaction to one of these agents in infancy must be very rare, and we usually use them for only 3 or 4 days. This use of the antibiotics in respiratory infections is limited to the first month or two of allergy treatment or until the patient is less susceptible to the violent attacks. After treatment has been carried on for a month or two, the attacks almost always become less frequent and less violent and the antibiotics need not be given so frequently.

Vaccine therapy is certainly of value in asthmatic babies; this is evident to anyone who has had any experience with it. The scientific explanation of this phenomenon is by no means clear. The whole subject of bacterial allergy or the part played by infection in allergic disease is difficult and complicated. There is a fine discussion of this in Dr. Cooke's text book.[2]

Theoretically an autogenous vaccine should be used. An autogenous vaccine may be desirable if one can be made from a chronic focus of infection or if improvement is unduly slow. If there is any doubt as to the quality of the vaccine, whether the important infecting organism is there, it can be mixed with a stock vaccine.

Usually stock vaccines are used, often a so-called mixed catarrhal vaccine which is available commercially; almost all practitioners have found the stock vaccines surprisingly successful. The dose must be so small that no symptoms are produced. Usually the vaccine is diluted one to ten and sometimes one to one hundred.

The treatment of inhalant allergies usually calls for injections of extracts. If there is any evidence that an inhalant is playing some part in the disease, and if that inhalant cannot be eliminated, it is wise to use injection treatment. Such an inhalant might be a pollen, a mold, feathers or house dust. One should be sure that the injections are not increasing the symptoms. In general, severe symptoms call for a weak extract; even in the absence of a positive skin test I usually start with a 1:10,000 dilution of the extract, that is a 1:1000 dilution of the stock 1:10 extract. Injections of the inhalant may be given once a week for 4 times and then once every 3 weeks. The injection dose is usually increased each time by about 50 per cent. A baby may tolerate the same dose of extract that is suitable for an older child, but he does very well on a much smaller dosage.

This treatment should be continued for a long time. A difficult case will require treatment for several years, a mild case which responds quickly and remains perfectly well should be treated for about one year. It is obviously important to keep the asthma under control, and later to be on the watch for recurrences.

The prognosis is about the same as in older children. Of the babies in this study, 17 were followed for 4 years or longer. Of these, 12 have had no symptoms for more than a year and 5 still wheeze. Of the 5 that still have trouble, one wheezes frequently but is not incapacitated, 3 occasionally have a very little wheezing and one wheezes several times a year with respiratory infections.

Probably treatment at this age is more important than in later childhood. Almost surely some of these babies without treatment would have gone on to the severe chronic asthma which is so difficult to treat.

SUMMARY

1. Asthma in the first year of life is common; asthma beginning at this time if untreated is likely to become severe.

2. Asthma in infancy, like that occurring later, is characterized by multiple allergies, with infection playing an important part.

3. In infancy food allergies are more frequent than later in life.

4. The general plan and method of treatment is the same during the first year as in the older age period.

5. The results of treatment are about the same in infancy and in later childhood.

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DISCUSSION

WILLIAM B. NEVIUS, M.D., East Orange: I wish to compliment Dr. Buffum on the thorough manner in which he has covered the subject of the diagnosis and treatment of asthma in the first year of life. Since there is very little that I can add, there are a few points of Dr. Buffum's that I would like to stress. The first is the early age at which asthma begins. It is a common experience for me to take care of a baby from birth and then with its first or second respiratory infection hear it begin wheezing. This may be as early as two or three months of age and is certainly not uncommon after six months of age. Sometimes, of course, the wheezing does not continue with subsequent respiratory infections, but all too frequently it does, and the picture that I have in my mind of that baby's future is a rather disheartening one. In the case of some infants it may be well into the second year of life before the true nature of the child's attacks of wheezing and dyspnea is recognized. On going into the history in detail, it seems clear that the condition actually began in the early part of the first year of life, but was not recognized.

In regard to the diagnosis, it is my impression that the characteristic symptoms of wheezing and dyspnea are not always present. Some of these babies will have rapid, labored respirations with the absence of wheezing and sibilant rales in the chest, and a few first exhibit by attacks of severe coughing. Since both of these types respond to the usual allergic management, it seems quite probable that they are fundamentally allergic in nature.

In discussing the specific cause or causes of wheezing, the speaker mentioned that in the more severe cases the causes are multiple, being due to foods, inhalants and infections. It is my impression that infections and inhalants, sometimes singly but usually in combination, are far and away the major causes of asthma in infants. Foods I would place way down at the bottom of the list. I have felt that if respiratory infections could be eliminated, 80 per cent of asthma in infancy and early childhood would be avoided.

The speaker has stated that he regularly employs the scratch method of testing. For somewhat over ten years I have employed only the intradermal method of testing, and perhaps I have been unusually fortunate but I have not experienced a single constitutional reaction during this time from skin testing alone. I have much more confidence in the results of my skin tests now than I had when I was using scratch tests. For instance, the speaker stated that out of 30 cases, only one gave a positive scratch test to dust and that in an exquisitely allergic child. It is my impression that my positive tests to dust run around 70 to 80 per cent, and I believe these are valid tests, for when these infants are treated with dust and vaccine, the great majority of them shows significant improvement.

I concur wholeheartedly with Dr. Buffum in his general principles of treatment. Where the infectious element is predominant, I not infrequently give 300,000 units of aqueous procaine penicillin every 12 hours, rather than just once a day. The employment of an antibiotic is almost routine in these cases, and I, too, favor Terramycin.® Adrenalin 1:1000 is of course an extremely valuable drug, and I frequently give simultaneously 0.3 to 0.5 cc. of adrenalin in oil in order to get a prolonged effect. Dr. Buffum no doubt uses ephedrine also. I feel that with the recent enthusiasm for the antihistamines the reliable qualities of ephedrine have been overlooked, and I frequently find it useful in doses of 8 mg. (⅛ grain) combined with a similar amount of phenobarbital given every three to four hours. So far I have not had occasion to use ACTH or cortisone in an infant under 12 months of age, although I would not hesitate to do so if the case seemed severe enough.

Naturally, desensitization is the backbone of the preventive method of treatment. Almost all of these infants receive house dust and vaccine in combination with whatever other allergens are indicated by the skin tests, such as the pollens and the fungi. One item that should not be overlooked is the instruction to the mother as to how to dustproof the baby's bedroom. She will be well repaid for whatever trouble this gives her, for it must be remembered these infants spend well over one half of their lives in the bedroom. In the handling of repeated attacks, which are so typical of this disease, one point that might be kept in mind is the use of a different antibiotic with each subsequent attack. If a drug has worked well with one attack, there is a tendency to continue it in all future attacks. This seems to me like a rather easy way to develop tolerance to a drug, and I think it would be wise to rotate, for instance, penicillin, sulfadiazine, Gantrisin®, Aureomycin® and Terramycin® as subsequent attacks come along.

I wish to thank Dr. Buffum again for his comprehensive paper.

IATROGENIC MENINGITIS*

Milton Cutler, M.D. and Paul Cutler, M.D., Hammonton, N. J.

Two cases of meningitis resulting from lumbar puncture are reported, with an extensive review of the literature. The importance of careful bacteriologic studies and antibiotic sensitivity determination is stressed.

Bacterial meningitis as a complication of lumbar puncture has been reported infrequently. The reluctance to present iatrogenic disease is probably a factor in the relatively few articles on this subject in the past. The increasing use of lumbar puncture for diagnostic, therapeutic, and anesthetic purposes has resulted in emphasis of this ever present risk. Kremer [1] describes four cases; three following intrathecal penicillin administration and one following spinal anesthesia. Botterell [2] reports two cases and Harris [3] four following intrathecal administration of penicillin. Weinstein,[4] Pastor,[5] Vuylsteke,[6] Evans,[7] and Yow [8] report eleven cases (in aggregate) of meningitis following spinal anesthesia. According to Barrie,[9] eleven out of ninety-six patients operated upon under spinal anesthesia in one British hospital during a short interval developed meningitis of a low grade type; the causative organism was not identified. Two more cases resulting from spinal anesthesia are reported by Davidson.[10] Brown's case [11] was observed after caudal anesthesia. Kerman [12] reports a case following encephalography and reviews fifty-five cases of *Pseudomonas aeruginosa* meningitis of which at least twenty were due to lumbar puncture. Germer's [13] case was apparently due to lumbar puncture. Stanley [14] reviewed forty-one cases of *Pseudomonas aeruginosa* meningitis; fourteen followed diagnostic lumbar puncture, ten followed spinal anesthesia, two followed pneumoencephalography, and one resulted from the intraspinal administration of tetanus antitoxin. In Keefer's [15] four cases the original spinal fluid removed was proved to be sterile even though meningitis ensued.

Routes of bacterial contamination are the anesthetic solution, unsterile instruments, supposedly sterile water used in rinsing syringes and needles, "sterile jars" used in storing syringes, air, and vials of penicillin used for intrathecal medication. Further, Dickson [16] states that he has not infrequently encountered in the centrifuged deposits of lumbar puncture specimens, squamous cells from the skin with staphylococci and occasionally even little cylindrical fragments of skin punched out by the exploring needle. The introduction of a foreign substance intrathecally, acting as an irritant, will stimulate the outpouring of protein and sugar rich fluid which may favor still further the growth of a contaminant. The possibility of some organism actually being enhanced in its growth in the presence of penicillin exists.[3,18] These organisms are the ones usually found in iatrogenic meningitis. The most commonly reported organism in this disease is *Pseudomonas aeruginosa*. Other bacteria occasionally reported are *E. coli, Klebsiella pneumoniae, B. proteus, Aerobacter aerogenes, Alkaligenes fecalis,* the enterococci, and combinations of these organisms. In the cases referred to earlier, the great majority were due to *Pseudomonas aeruginosa;* three were due to *E. coli,* one to *Alkaligenes fecalis,* one to the *enterococcus* and in over a dozen cases the causative organism was not identified. It will be noted that these bacteria are mostly Gram negative intestinal bacilli, commonly found on skin surfaces; most of them were formerly regarded as non-pathogenic or weakly pathogenic. These organisms, usually resistant to most of the antibiotics, have become, in the last few years, more and more responsible for infections of the meninges, urinary tract, alimentary tract and heart valves. Jawetz [19] has given the name "opportunist" to these. Lacking true invasive powers, they become patho-

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genic in infants, debilitated adults, and when instrumentally implanted into the urinary tract or spinal fluid. Penicillin seems to aid these opportunists by eliminating some of the more commonly known pathogens and may actually stimulate their growth.

The diagnosis of iatrogenic meningitis is usually simple. A history of lumbar puncture followed in twelve hours to ten days by meningitic signs establishes the diagnosis. This type of meningitis, in contrast to the epidemic meningoccoccal type, tends to be subacute only in its intensity; the natural course of the disease is long, and is characterized by remissions and relapses. Exacerbations have been known to occur even months after an apparent cure.

CASE REPORTS

No. 1. A 19-year old white female was admitted to the Atlantic City Hospital on August 15, 1951, with the chief complaints of headache, chills and fever. Twelve days prior to admission she had delivered a healthy male child in another hospital under spinal anesthesia. Four days postpartum she had developed a headache and low grade fever; she was discharged on the fifth day. On the day following her return home she again had headache, fever and weakness lasting two days. On the twelfth postpartum day she developed severe aching in the back of her neck traveling through to her eyes, chilly sensations, malaise and fever. At this time she was admitted to this hospital. Physical examination on admission revealed an acutely ill young female whose vital statistics were as follows: temperature, 102; pulse, 88; respirations, 26; blood pressure, 104/70. The entire examination was within normal limits, except for mild nuchal rigidity and positive Kernig and Brudzinski signs. Lumbar puncture revealed a colorless, turbid fluid under no increased pressure. The fluid showed a definite greenish-yellow fluorescence when viewed by ultraviolet light, contained 120 mg. protein, less than 25 mg. sugar, and 670 mg. chloride per 100 cc., 1200 white cells per cu. mm., 89 per cent of which were polymorphonuclear leukocytes; no bacteria were seen on direct smear. Urinalysis showed a trace of albumen and a few white blood cells. Complete blood count: hemoglobin, 11.5 gm.; red cells, 4,700,000; white cells, 14,900; 88 per cent neutrophiles, 11 per cent lymphocytes. Blood culture showed no growth. Spinal fluid culture revealed a moderate growth of *Pseudomonas aeruginosa*. The patient was treated with aqueous crystalline penicillin, 500,000 units every twelve hours, 1 gram of dihydrostreptomycin every twelve hours, Terramycin®, 500 mg. every four hours, and symptomatic therapy. By the fourth hospital day the temperature had come down to normal. She remained well until the tenth hospital day when, even though antibiotic therapy had been continued, there was a recurrence of chills, fever, headaches and nuchal rigidity. By this time, the causative organism had been isolated by culture and sensitivity tests performed. These indicated that the strain of *Pseudomonas aeruginosa* involved was resistant to penicillin, bacitracin, streptomycin and Aureomycin,® but was moderately sensitive to both Terramycin® and Chloromycetin®. Accordingly, streptomycin and penicillin were discontinued, Terramycin® was continued and Chloromycetin® was added to the therapeutic regimen, being employed in doses of 500 mg. every four hours. Chills, fever and headache continued for eight more days. By the twenty-first day of hospitalization (the twenty-ninth day of illness), the temperature became normal and stayed so for the remainder of her hospitalization. Antibiotics were discontinued two weeks after the temperature became normal, and the patient was discharged from the hospital on September 27, forty-three days after admission. At the time of this writing, twenty months later, she is completely well, has no sequelae, and has had no recurrences.

No. 2. On October 19, 1949, a 60-year old white male had a subtotal gastric resection performed for a chronic duodenal ulcer. This was done under continuous spinal anesthesia in a Philadelphia hospital. The immediate postoperative course was uneventful. About the tenth day following surgery, he became irritable, disoriented, and later lapsed into stupor. Lumbar puncture revealed a cloudy fluid, an initial pressure of 300 millimeters water and Gram-negative motile organisms. Initial therapy consisted of 200,000 units of penicillin every four hours, and sodium sulfadiazine intravenously. The following day, sulfadiazine and penicillin were discontinued and Chloromycetin® was started, 250 mg. initially, and 250 mg. every four hours thereafter. Intermittent low grade fever continued until November 16, when, in spite of continuing Chloromycetin® therapy, the temperature suddenly climbed to 104°. A repeated lumbar puncture revealed a very cloudy fluid under increased pressure. Following this finding 1,000,000 units of penicillin were given every two hours; penicillin was also given intrathecally, and streptomycin, 1 gram every six hours, was begun. On November 18, 1949, the patient was admitted to Valley Forge Army Hospital. He appeared poorly nourished and both acutely and chronically ill. The temperature was 102°, pulse 80, blood pressure 170/80. He was poorly oriented, responded only sporadically to questioning and stimuli, had marked nuchal rigidity, an apical, crescendo-type murmur, dry skin of poor turgor and minimal generalized adenopathy. Muscle tonus in general was flaccid, cranial nerves were intact and there was a suggestion of a positive Babinski sign on the right side. Lumbar puncture on admission revealed 859 white blood cells, 68 per cent polymorphonuclear leukocytes, 32 mg. sugar, 695 mg. chloride, 185 mg. protein per 100 cc. Culture of the spinal fluid revealed *Pseudomonas aeruginosa*. Sedimentation rate was 26 mm. per hour, white cell count 9700, with 69 per cent polymorphonuclear leukocytes, 30 per cent lymphocytes, hemoglobin 80 per cent. Urinalysis and serology were negative. Chest roentgenogram showed emphysema,

a normal cardiac silhouette and a tortuous, sclerotic aorta. Electrocardiogram showed an old anterior wall myocardial infarction. Intramuscular and intrathecal streptomycin therapy were initiated and continued until December 13 and December 2, respectively. For the first two weeks of hospitalization the patient continued to have lucid intervals alternating with stupor. He subsequently improved, and on December 22, the spinal fluid was almost completely normal. His clinical course was one of gradual and slow improvement until the time of discharge on March 31, 1950. Recovery was hindered by the appearance of a flaccid type urinary retention not long after admission. This was considered to be a bladder paralysis, secondary either to the meningitis or to the intrathecal therapy. However, bladder function gradually improved, and was completely normal at the time of discharge. At the time of this writing, the patient is alive, well, and free of sequelae.

DISCUSSION

The fact that *Pseudomonas aeruginosa* elaborates a green fluorescent pigment was utilized in the first patient as a quick clinical means of bacterial identification.[17] To perform this test, the spinal fluid from a suspected case of pseudomonas meningitis is irradiated with ultraviolet light (Wood's lamp); blue or green fluorescence is indicative of the organism. Since most cases of iatrogenic meningitis are caused by the pseudomonas organism it is felt that this test is important. Proper rapid bacterial identification becomes even more important when one realizes the therapeutic problems that are entailed with these organisms. To prove the specificity of this test, the authors have irradiated many spinal fluid controls (normal, luetic and other bacterial meningitis fluids); none showed fluorescence. Numerous other pathogenic species have been cultured on spinal fluid, and none elaborated fluorescent pigments. In addition, over a dozen different strains of *Pseudomonas aeruginosa* have been cultured on spinal fluid, and every one shows either a bluish white or bluish green fluorescence, even though the fluids are colorless when viewed in daylight. Production of fluorescent spinal fluids in laboratory animals will be performed in the near future and the results reported.[22]

Since the recognition of *Pseudomonas aeruginosa* as the most common cause of iatrogenic meningitis, various agents have been used for its treatment. Before evaluating these agents, one must realize that many patients with this disease became well spontaneously even before the chemotherapy era. Evans[20] found 50 per cent recovery rate in forty-two cases reported prior to 1936. Since then, sulfonamides have been used with varied, but usually little, success.[1,2,6,11] Penicillin has been demonstrated to be not only ineffective, but actually may stimulate growth of the pseudomonas.[13] Streptomycin has had somewhat more success.[4,5,13,14,21,23,24,25,26,27,28,29] Of twenty-three collected cases treated with streptomycin either intrathecally, parenterally, or combined, fifteen were cured and eight died; six of the cured cases had severe neurotoxic reactions from the therapy. Reports using Aureomycin,® Terramycin® and Chloromycetin® have been scant. Polymyxin has been very effective in the few reported trials.[8,19,30] Neomycin proved effective in two cases.[31,32]

From the foregoing data it appears that probably no single antibiotic is effective against all strains of pseudomonas, and that there must be a large variation from strain to strain in sensitivity to each of the antibiotics. Fairbrother[33] demonstrated this variation with numerous strains of organisms in laboratory experiments. Yow,[34] doing sensitivity tests with fifty strains of pseudomonas, demonstrated the complete ineffectiveness of penicillin and bacitracin, the partial effectiveness of Terramycin®, neomycin, streptomycin, Aureomycin® and Chloromycetin®, and the 100 per cent effectiveness of polymyxin.

Reports on therapy of iatrogenic meningitis caused by organisms other than pseudomonas have been very few. Interesting in vitro studies by Frank, *et al.*[35] have shown that these organisms are often resistant to antibiotics and that numerous strains of these organisms also show varying susceptibilities to antibiotics. Polymyxin is much less effective against these organisms than against pseudomonas.

These results indicate the importance of laboratory control in antibiotic therapy. They clearly indicate that individual members of many bacterial species do not behave consistently toward the various antibiotics. It follows, therefore, that the identification of an

organism does not necessarily indicate its sensitivity, and that in order to institute effective rational therapy, we must not only identify the organism, but also determine its sensitivity to antibiotics.

SUMMARY

1. Iatrogenic meningitis is on the increase.

2. Lumbar puncture for diagnosis, anesthesia, or therapy is responsible for most cases.

3. *Pseudomonas aeruginosa* is the etiologic agent in most cases.

4. Inspection of the spinal fluid with ultraviolet light is a simple, rapid clinical means of identifying this organism.

5. Penicillin should not be administered in iatrogenic meningitis.

6. Effective therapy depends upon proper identification and sensitivity tests of the organism involved.

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PRIMARY MYOCARDIAL DISEASE

"Primary myocardial disease" as described in a report from the Children's Medical Center, Boston,* is a clinical syndrome with the following common features: (1) enlarged heart; (2) no significant murmurs; (3) abnormal electrocardiograms; (4) normal blood pressure.

Although rheumatic and congenital heart disease are responsible for most of the heart disorders in infancy and childhood this syndrome appears in a significant number of patients. It is produced by five entirely distinct pathologic entities which are difficult and sometimes impossible to distinguish in the living patient. The five etiologies of this syndrome are: glycogen storage disease of the heart, aberrant left coronary artery, medial necrosis of the coronary arteries, idiopathic myocarditis, and subendocardial sclerosis. These five individual disorders present an almost identical clinical syndrome. Patients show marked cardiomegaly by x-ray and left ventricular hypertrophy or T-wave changes indicative of myocardial damage in the electrocardiogram.

Among forty-five patients with this syndrome two subdivisions exist. One group includes glycogen storage disease of the heart, aberrant left coronary artery, and medial necrosis of the coronary arteries. These are rare conditions which are most often seen in infants less than six months of age, in whom congestive heart failure is rare. The much larger second group consists of idiopathic myocarditis and subendocardial sclerosis. These usually occur beyond the age of six months; congestive failure is present and often severe. The first group cannot be treated successfully whereas in the second group digitalization is frequently of value.

* Rosenbaum, H. D., Nadas, A. S. and Neuhauser, E. B. D.: Primary Myocardial Disease in Infancy and Childhood. Am. J. Dis. Child., July, 1953.

DEXTRAN IN SHOCK

A critical study of dextran, the latest form of plasma extender has been described by Amspacher and Curreri [1] from their experiences in a Mobile Army Surgical Hospital in Korea.

Sixty wounded men were treated with dextran. All were in obvious shock or had impending shock. They had been wounded by mines, grenades and shell or mortar fire and were suffering from multiple traumatizing shell fragment wounds which were often complicated by fractures and large hematomas.

In each case the use of dextran produced a satisfactory result. There were no recognizable reactions, immediate or delayed. The postoperative period was free of untoward complications. Stable, normal blood pressures and low hematocrit levels indicated that dextran was successful in producing an expansion of the fluid component of the blood volume. All patients had adequate daily urinary output.

None of the patients receiving dextran with or without dextrose solution in addition showed any evidence of albuminuria. On the other hand a number of patients who received whole blood or plasma exhibited albuminuria during the recovery phase.

Autopsies on three casualties who had received dextran showed no evidence to indicate any toxic effect of this substance.

1. Amspacher, W. H. and Curreri, A. R.: Dextran in Control of Shock.. Arch. Surg., June, 1953.

IDIOPATHIC HEMORRHAGIC INFARCTION OF THE TESTIS IN THE NEWBORN*

Anthony R. Fernicola, M.D., Newark, N. J.

The fifth reported case of idiopathic hemorrhagic testicular infarction is presented with a discussion of its signs and symptoms, differential diagnosis and treatment.

Hemorrhagic infarct of the testis is very rare in the newborn infant, and orchidectomy in the neonatal period is an unusual procedure. This condition as seen in the first and second decades of life, however, is not uncommon and is most often the result of torsion of the spermatic cord. Testicular infarction has been reported as a complication of strangulated hernia in the infant [1] and has been noted as a result of torsion of the spermatic cord in the newborn.[2,3,4] However, the presence of hemorrhagic infarct of the testis in the newborn also has been observed in the absence of demonstrable evidence of torsion of the spermatic cord, hernia, or trauma incident to labor. That complete gangrene of the testis in the newborn can be a spontaneous development without predisposing factors or an antecedent cause remains very questionable.

Five cases of hemorrhagic infarction of the testis in the newborn due to torsion of the cord have been reported, and four cases of testicular infarct in the newborn with no demonstrable cause have been described: one by Campbell,[5] two by Mac Lean [6] and one by Ravich.[7] The fifth case of idiopathic infarct of the testis in the newborn is herewith presented.

CASE REPORT

Baby boy, J. T., birth weight 7 pounds, 7 ounces, was born normally at the Clara Maass Memorial Hospital on January 27, 1952, of a 24-year old primipara. The mother (a registered nurse) examined the newborn infant within two hours after delivery and observed an enlargement of the left scrotum which was discolored and which did not arouse the infant on palpation.

On the third day of life, examination disclosed a smooth, non-tender, globular, firm mass the size of a large green olive occupying the left scrotum, the wall of which was bluish and nonedematous. The scrotal wall was adherent to the mass which was not in an elevated position in the scrotal sac. There was ample distance for palpation of the spermatic cord between the superior border of the mass and the external inguinal ring which was not dilated. There was nothing significant upon palpation of the left spermatic cord. The left scrotum did not transilluminate light. The right scrotal sac showed evidence of a small amount of hydrocele fluid. The right testis was of normal size. A provisional diagnosis of left hematocele and right hydrocele was made.

On the fifth day incision and drainage of the apparent hematocele was decided upon since there was no change in the size or consistency of the scrotal mass. Without anesthesia an anterior longitudinal incision was carried through the scrotal tunics. The tunica vaginalis was entered, and no bloody fluid or clot was present. A line of cleavage was obtained between the mass and the parietal layer of the tunica vaginalis with slight difficulty, except at one place where a strip of capsule on the anterior border of the mass remained densely adherent to the parietal layer of the tunica vaginalis. The spermatic cord was glistening in appearance, was not discolored or edematous and entered the posterior border of the mass. The investment of the parietal tunica vaginalis was high on the spermatic cord. There was no gubernaculum or mesorchium. No twist in the intravaginal or extravaginal portion of the spermatic cord was seen. The epididymis could not be identified. A longitudinal incision was then made into the mass on its anterior border to determine the presence of testis within a possible organized hematocele clot. The entire surface of the cut section of the mass was firm, granular, and dark red with no evidence of normal testicular tissue. The cut section of the mass resembled an organized blood clot. No bleeding resulted from incision into the mass. The intravaginal portion of the spermatic cord was incised between clamps, and the mass and attached portion of the spermatic cord were removed. A small rubber drain was placed in the scrotal sac. The postoperative course was uneventful, and the infant was discharged on the second postoperative day.

Pathological Report (Dr. Edwin H. Albano):

* From the Clara Maass Memorial Hospital (formerly Lutheran Hospital), Newark, N. J. Presented before the Section on Urology, May 18, 1953, at the Annual Meeting of The Medical Society of New Jersey, Atlantic City.

Grossly (See Figure 1) the testis was enlarged and measured 4.9 centimeters in its longest diameter. The surface was smooth and glistening except for small scattered tabs of pale yellow fatty tissue attached. The tunica was congested. On section the parenchymal markings were obliterated, and the tissue had a mottled, reddish-black, solid hemorrhagic appearance. Dark, thick fluid blood could be expressed from the cut surfaces.

Microscopic description (Figures 2 and 3): The chief pathologic process was one of diffuse hemorrhagic infarction. The major portion of the testicular parenchyma was destroyed and replaced by extensive hemorrhage. Many of the erythrocytes lay in pools of edema fluid and laked blood. The few remaining tubules possessed a juvenile type of epithelium showing complete absence of spermatogenic differentiation. Some of the tubules had a pale, washed-out, ghost-like appearance. Bizarre tubular fragments and the remains of numerous pyknotic cell nuclei, as well as a few polymorphonuclear leucocytes and histiocytes, were scattered throughout. The tunica overlying the area of infarction was congested and necrotic. A moderate amount of fibrin was deposited in the adjacent tissue.

Diagnosis: Hemorrhagic infarct of the testis.

DISCUSSION

Bluish discoloration of a smooth, globular enlargement of the hemiscrotum is the outstanding clinical characteristic of idiopathic hemorrhagic infarct of the testis in the newborn. The thin, delicate scrotal tunics are transparent to the symmetrically enlarged, purplish-red gangrenous testicular mass. The discoloration of the scrotal skin may be irregular in distribution. Objective findings vary according to the time of occurrence of the process of hemorrhagic infarction during intra-uterine life, labor or the neonatal period. Fever is low-grade, if present. Later the bluish, discolored scrotal wall becomes less edematous and painful and is adherent to the testicular mass which is firm and non-tender.

The differential diagnosis of idiopathic hemorrhagic infarct of the testis should be less difficult in the newborn than in infancy, childhood and adult life since epididymitis, or-



Figure 1. Section of testis of newborn showing marked enlargement, obliteration of parenchymal markings and mottled, hemorrhagic appearance.

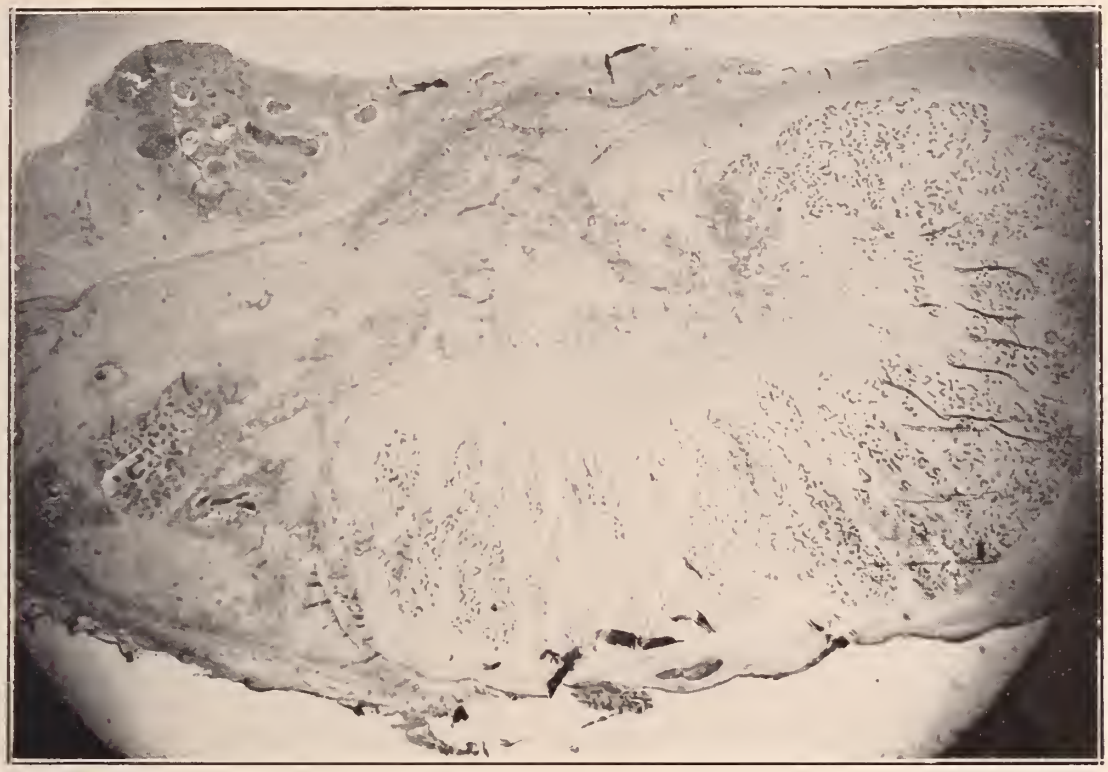


Figure 2. Microscopic section revealing the parenchyma of the testis to be almost entirely destroyed and replaced by extensive hemorrhage.

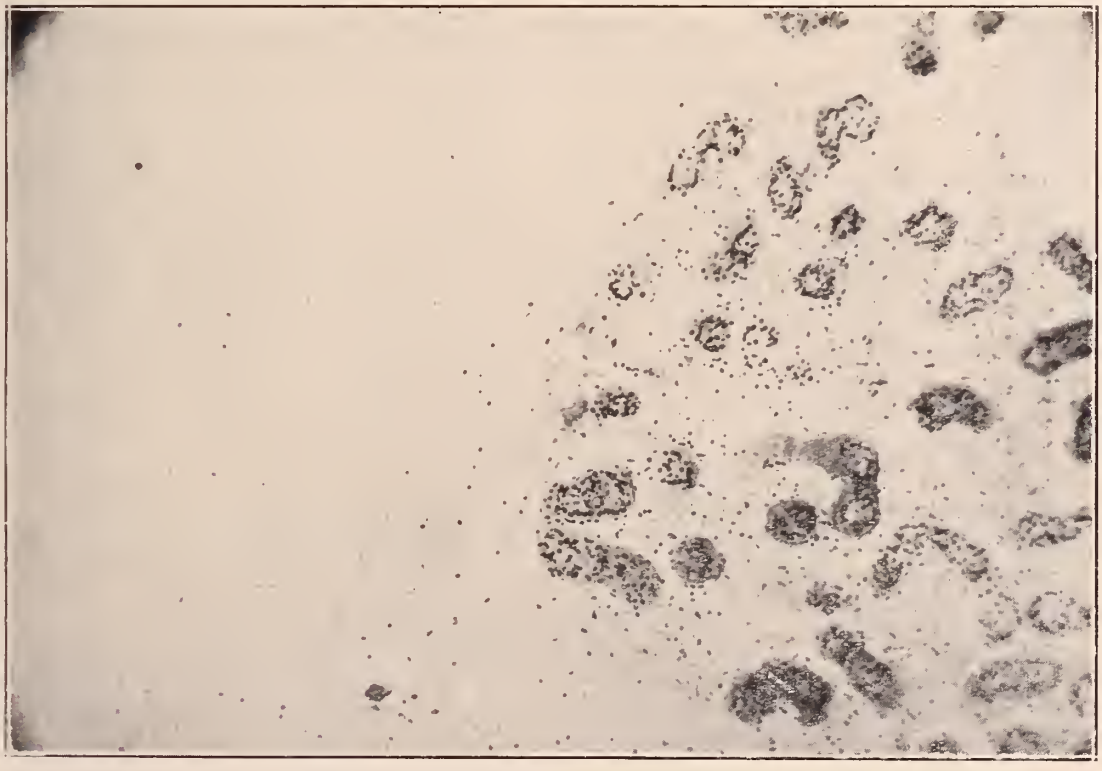


Figure 3. Microscopic section showing few scattered tubules that possess a juvenile type of epithelium and revealing complete absence of spermatogenic differentiation.

chitis and torsion of the spermatic cord and of the testicular and epididymal appendices are far more common after the neonatal period. Tumors of the scrotal contents, other than tumor testis, are very rare in the newborn. Tumor of the epididymis in the newborn has been reported.[8] Testicular tumor, hematocele and hemorrhagic orchitis comprise diseases which are most difficult to differentiate.

Hydrocele of the tunica vaginalis testis appears as a smooth, globular, non-tender cystic enlargement of the hemiscrotum which transilluminates light.

Hematocele is difficult to differentiate from hemorrhagic infarct and tumor of the testis. An antecedent history of injury is usually present. Trauma incident to labor is not easily established. Hematocele presents as a smooth, globular, discolored mass which does not transilluminate light. The consistency of the hematocele and the degree of tenderness vary.

Tumor of the testis is rare, and tumor of the epididymis is rarer still. The insidious onset of tumor testis with unilateral discolored enlargement of the scrotum which might contain bloody fluid within the tunica vaginalis presents great difficulty in differentiation from hemorrhagic infarct of the testis. The testis may be palpable as a firm, freely movable, nontender heavy mass. Palpation of an epigastric mass or supraclavicular lymph nodes and x-ray evidence of lung metastases are consistent with the findings of tumor testis. A positive Aschheim-Zondek test is significant. Biopsy may be the only possible method of diagnosis.

Torsion of the spermatic cord with consequent hemorrhagic infarct of the testis presents early edema of a painful and tender hemiscrotum which is discolored. Retraction of the testis upward toward the external inguinal ring is very significant. Elevation of the scrotum for support may enhance pain. There is no history of urogenital infection. The onset is acute.

Hemorrhagic infarct of the testis due to torsion of the cord and spontaneous untwisting of the cord would be indistinguishable from idiopathic hemorrhagic infarct of the testis on examination.

Hemorrhagic orchitis results from trauma or injury to the blood supply of the testis. Herniorraphy occasionally produces occlusion of arterial and venous channels of the testis, and testicular atrophy ensues. Obstetrical hemorrhagic infarction of the testis may follow severe hemorrhagic or traumatic orchitis incurred during labor. The presence of a testicular mass at birth would require negative serology to rule out syphilis and a biopsy to rule out tumor.

COMMENT

The presence of gangrene of the testis in the newborn infant in the absence of evidence of a specific cause precludes positive explanation of the mechanism of the process of hemorrhagic infarction in such instances. However, vascular occlusion of either arterial or venous channels or both produces hemorrhagic infarction. The arterial supply of the testis arises from three sources. The internal spermatic artery, which is the main arterial supply, originates from the aorta. The deferential artery and cremasteric artery arise from the inferior vesical and deep epigastric arteries respectively. These arteries anastomose with one another, and ligation of the internal spermatic artery does not embarrass the vitality of the testis. The pampiniform plexus of veins which drains the testis becomes the testicular vein in the region of the deep inguinal ring. In spite of the multiple source of blood supply to the testis no other parenchymatous organ is more vulnerable to acute complete circulatory deprivation and necrosis.

The anatomic disposition of all of the testicular channels within the sheath of the spermatic cord predisposes them to complete occlusion by extrinsic pressure, trauma or torsion of the spermatic cord incident to the presence of inguinal masses, surgical interference and difficult labor. The extremely delicate vascular channels contained within the spermatic cord of the newborn are in great jeopardy from trauma. Although it is assumed that surgical untwisting of the spermatic cord within three hours after torsion of the cord will restore the blood flow to the testis and salvage its structural and functional integrity, it might not be presumptuous to regard occlu-

sion of the vascular supply of the testis in the newborn beyond fifteen minutes as capable of producing irreversible damage.

Etiology of this condition is related to anatomic variations of the scrotal contents. It is probably significant that the parietal layer of the tunica vaginalis testis was found invested high on the spermatic cord, a long intravaginal segment of the spermatic cord was present and there was no gubernaculum or mesorchium. This topographic variation of the left scrotal contents could predispose the spermatic cord to transitory torsion with infarction of the testis and spontaneous resolution. Pathologic evidence of beginning organization of the inflammatory process with adhesions of the scrotal tunics would place the onset of the process of infarction of the testis in the case herein cited during intra-uterine existence or during the labor period.

Obstetrical hemorrhagic infarction is undoubtedly far more common than is generally appreciated, and its precursor in the nature of hemorrhagic orchitis is probably not infrequent. In such cases it is likely that anatomic variations of the scrotal contents are necessary to produce torsion of the testis and spermatic cord.

Clinical evidence of bluish discoloration of a smooth enlargement of the hemiscrotum has been found in all cases of hemorrhagic infarction of the testis in the newborn that have been recognized. However, the diagnostic problem that appears in such cases demands surgical intervention. This is not only for the purpose of decompressing a possible hematocele and sparing the testis from pressure atrophy or performing orchidectomy for hemorrhagic infarct, but also for biopsy or orchidectomy in the possible presence of tumor.

SUMMARY AND CONCLUSIONS

1. Bluish discoloration of a smooth, globular enlargement of the hemiscrotum is the outstanding clinical characteristic of idiopathic hemorrhagic infarct of the testis in the newborn.

2. Hematocele and tumor of the testis are difficult to differentiate from hemorrhagic infarct.

3. Surgical exploration is indicated for the purpose of accurate diagnosis and treatment.

4. The etiologic basis of the development of infarction of the testis probably lies in the anatomic variations of the scrotal contents. Trauma, exertion, labor, inguinal surgery and the presence of inguinal masses provide influences which, when superimposed upon structural deviations of the testis, spermatic cord and their tunics, are capable of invoking complete or temporary circulatory occlusion of the vascular channels and irreversible damage to the testis.

5. Obstetrical hemorrhagic infarction of the testis during the process of normal labor is apparently more common than generally appreciated and may account for many cases of unexplained testicular atrophy seen in the adult. The fifth case of hemorrhagic infarct of the testis in the newborn in the absence of a demonstrable cause is reported.

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ORGANIC DISEASES SIMULATING PSYCHOGENIC DISORDERS*

A. D. Dennison, Jr., M.D., Indianapolis, Ind.

Acknowledging that the majority of office patients seen today have little or no organic basis for their complaints, the author enumerates and discusses several organic diseases, the early symptoms of which resemble anxiety states.

It is well recognized that psychoneuroses and anxiety states present definite, though varied, patterns in themselves. It is not necessary to review the morphology of such emotional illnesses. The experienced physician is familiar with the clinical picture of psychoneurosis as a "syndrome" and readily recognizes such patients when he sees them.

However, there are certain organic conditions of which the symptoms, in their *early stages,* so closely resemble the symptom complexes of psychoneuroses, that extreme diligence must be exercised in differentiating such diseases from the so-called functional ones. It is the purpose of this paper to discuss some of these organic illnesses and point out similarities in symptomatology.

MULTIPLE SCLEROSIS

Those busy physicians who found time to read *The Cardinal* by Henry Morton Robinson, published by Simon and Schuster, will remember the keen medical point brought out by the old priest who has been a failure through most of his priesthood. He somehow lacked the energy and vigor to run a successful parish. Thus, he was pushed aside by his old seminary friend, the cardinal, and gradually went down the scale in parishes to which he was assigned. Then the young priest, about whom the book is written, takes an interest in the older and somewhat saintly priest who had seemingly made a failure of his life. A kindly and keen clinician is brought in who diagnoses the elderly priest's illness as multiple sclerosis. When the cardinal of that area hears of his friend's terminal illness and learns that he has missed understanding his friend's problem, has been responsible for making his life's tasks much worse and more unpleasant, he comes to his bedside and realizes that this man was not a failure but an ill man.

The following conversation by the young priest who had called in his doctor friend brings out a strong clinical point.

Dr. John Byrne was putting his stethoscope back into his bag. "How long have you known this man?"

"I never actually saw him till six months ago, but I've heard of him for many years."

"And what was it that you heard?"

"Everyone spoke of him as a saint."

"Did anyone ever remark his lack of energy?"

"I always got the impression that he was frail, not actually sick, mind you, yet somehow lacking in physical vigor."

"That clinches it," said Dr. Byrne. "Multiple sclerosis in its milder forms and earlier states is hard to diagnose. It sets in quite early in life and sometimes goes away again, always taking a fraction of the victim's physical and nervous strength."

"Could you say," asked Stephen, "that he might have been sick for many years?"

"I could say that."

Mixed emotions of pity and relief surged through Stephen. Physical illness explained a great deal about Ned Halley's deficient energy.

How often have we seen trembling, ineffectual, tired, weak, and exhausted patients in our office who have ultimately turned up with a frank organic condition such as multiple sclerosis? It is most humbling to hear from a colleague that he has made such a diagnosis in a patient labelled by the original physician as a neurosis.

* From the Department of Clinical Research, Eli Lilly and Co.

MYXEDEMA

The great teller of medical tales, Dr. A. J. Cronin has written about the young doctor called in to see a local gardener who had become psychotic. The young doctor's function was simply to sign the commitment papers and confirm the older physician's opinion that the man was completely insane. After examining the well known and much beloved local character, though fearful of his conclusions, and not wanting to antagonize his older colleague, Dr. Cronin tells of the young physician's impression that the patient has myxedema with predominantly psychotic manifestations. With great trepidation and a desire to be tactful, he tells the older doctor that he cannot conscientiously sign the papers, that he believes the man has myxedema and with thyroid therapy may be spared commitment. In a rage the older doctor leaves with a challenge that the young physician attempt his miraculous cure. To the joy of the townspeople, the man's employer, and the neophyte physician, thyroid miraculously changed this mentally incompetent individual to his former pleasant and popular personality.

Dr. Rulon W. Rawson and Dr. J. E. Rall [1] point out that the onset of symptoms and signs of myxedema may be quite insidious. The patient is unable to date the beginning of the change in himself. Indeed, friends and family are unable to pinpoint when the lethargy, the change in skin, the change in energy, the change in voice and facial appearance occur. The authors go on to say that occasionally the picture of manic-depressive psychosis may occur in myxedema. This condition is usually corrected by administering thyroid and gradually raising the metabolic rate.

CARCINOMA OF THE PANCREAS

This maliciously difficult condition is a bugbear to the internist and a challenge to his diagnostic acumen. The classical backache so often present as a common complaint in text books may be misinterpreted as a "garden variety" type of backache. As early as 1931 Yaskin [2] called attention to the frequency of symptoms of a neurotic or psychotic nature which may occur early in pancreatic malignancy. He stated that these manifestations may precede other evidence by as much as three months or more. Latter and Wilbur [3] reiterate this point. Finally, a more recent article by Ulett and Parson [4] stated that the earliest symptom of parenchymal disease of the pancreas, especially carcinoma, may be easy fatigability. This may also be associated with dull pain deep in the midabdomen and a depression in mood. Yaskin's four patients all presented obstinate insomnia, not related to pain, nor relieved by the usual sedatives, and all of them had depression with crying spells, and marked anxiety. Everyone excepting the patients attempted to label their problems as psychogenic. How many of us in recording a history of anxiety, insomnia, depression, emotional instability, etc., would think of the possibility of carcinoma of the pancreas? Indeed, these are terms and symptoms richly seeded in psychiatric textbooks.

PORPHYRIA

Acute intermittent porphyria, though rare, may present a bizarre pattern of nervous symptoms to confuse the doctor. If the finding of a dark red urine is not reported by the patient, not stumbled onto by the physician, the abdomen of this patient may reveal multiple surgical scars. C. J. Watson,[5] the noted authority on this disease, makes the following statement, "Among the psychic changes a pseudo-hysteria is most common. Many cases have been wrongly classified, at least for a time, as neurasthenia or hysteria. Patients subject to intermittent acute porphyria have often been excessively nervous for long periods, even many years before the attack. In some cases the porphyria masks under the appearance of schizophrenia or of a manic or depressive state." Only the well-read clinician, the open-minded physician, the "never-satisfied-with-himself" diagnostician will occasionally come up with such a correct diagnosis in a patient who has been tagged as just another neurotic.

LITTLE STROKES (ALVAREZ'S SYNDROME)

There have been few contributions of such value as the demonstration to the physician of this era how many varied, bizarre, and intangible complaints can result from multiple small cerebral thromboses. Any physician who has not read some of Dr. Walter Alvarez's

articles on the "little stroke" should do so. For in so reading many of his patients will flash through his mind as fitting this picture so admirably. These are the people who have had multiple x-ray studies, multiple laboratory tests, multiple consultations, and yet who go on in their slow deterioration with symptoms and signs which may range from transitory weakness of an extremity to errors in judgment and bizarre bouts of abdominal pain, diarrhea and the like. It is most important for the geriatrician to appreciate that the disinterested, lethargic, irritable older man who was once a tycoon of industry, an "intellectual giant," has now started the slow downhill trip to ultimate senility. Chapter 12 in Alvarez's [6] book entitled "Little Strokes, A Common Cause of Nervous Syndromes," is rich reading for the conscientious medical practitioner.

ALLERGIC TOXEMIA

Many a child, constantly rubbing the end of his nose, irritable and listless, lacking in energy and the desire to keep up with other children in play, may be suffering from the enervating features of allergic toxemia. It must surely be the experience of many physicians with hay fever that they have to push themselves during the height of the season. Their drive is diminished, their disposition is not as well controlled, and each day seems an effort and a fight. Though not well brought out in textbooks of medicine, allergic toxemia is a very real state. Again, the nonspecific nature of these complaints may force a functional diagnosis on the attending physician.

HYPERPARATHYROIDISM

Were one presented with an array of symptoms such as lassitude, muscular weakness, difficulty in muscular coordination, loss of appetite and loss of weight, how often would one suspect hyperparathyroidism? Yet this train of complaints may be the early symptoms of primary hyperparathyroidism. As the picture progresses the classical skeletal, gastrointestinal, and urinary tract features may develop. But as these take time, one's clinically suspicious nature must maintain a constantly sensitive threshold. It is in these cases that a laboratory finding of hypercalcemia, more significantly the hypophosphatemia, the increased urinary excretion of calcium and finally the increased serum phosphatase activity, help verify the diagnosis which began as the most indefinite of complaints. It must be pointed out that the level of the serum phosphate may be altered by the frequent coexistence of renal function impairment, which tends to produce a rise in serum phosphate. Again a knowledge of the insidious nature of early symptoms, of the frequency with which these symptoms may be explained on a psychogenic basis, an increased sensitivity to both functional and organic conditions, an ability to change one's diagnostic thinking, an ability never to conclude that one can rest on one's laurels will make for greater accuracy in diagnosis, earlier detection of organic problems, and thus more successful therapy.

MYASTHENIA GRAVIS

An injection of prostigmine in a patient with excessive fatigue of the voluntary muscles has been a helpful diagnostic measure in "smoking out" early cases of myasthenia gravis. Many patients whose early complaints did not reveal the classical dysphagia, dysarthria, diplopia, ptosis, and difficulty in chewing were given an early diagnosis and started on the present accepted method of treatment through this diagnostic test. It takes little extra time to test a patient with undue fatigue. A high index of suspicion in the patient who presents inability to hold up the head, difficulty in crossing the legs, tired arms which constantly want to drop to the side may suggest the use of this test and the disease. If the findings are positive the next step is naturally a chest x-ray searching for a malignant thymoma which may be present.

MISCELLANEOUS DISEASES

When one peruses older textbooks of medicine one reads many presentations on various disease states and their classical signs. Subacute bacterial endocarditis before antibiotics presented the café-au-lait appearance, Os'er's nodes, splinter hemorrhages under the nails, petechiae in the roof of the mouth or conjunctivae, the enlarged spleen, the harsh murmur, even the ruptured valve. But now we are

in the era of early diagnosis, the result of more successful therapies, better technics in the laboratory, keen radiologic approaches and interpretations. Thus, bizarre and atypical symptoms may not necessarily be the signpost to a psychiatric problem but the early manifestation of disease states not even entertained in the diagnostic thoughts of physicians of the Oslerian era. The easily palpable, large hydronephrotic kidney of that day is now the dilated pelvis with diodrast introduced through a catheter or given intravenously.

It is indeed certain that the wide experiences of many physicians could add to this list of organic diseases simulating functional conditions in their early phase. One thinks of the fatigue and nervousness of the epileptic; the fatigue, nervousness, and muscular weakness of the hyperthyroid who may be classified as a chronic anxiety state until the full-blown picture cannot be missed; chronic hypochloremia,[7] which may resemble psychoneurosis; the report of urologists that the clear cell carcinoma of the kidney may manifest itself early, before metastases, by an unexplained fatigue.

It is not necessary to point out the depressing effects of drugs such as bromides, barbiturates, morphine, and alcohol. How often these drugs may make a nervous person more nervous, a tired person more tired, a toxic person more toxic, an anxious person more anxious. The early stages of Parkinsonism with the slouch, trembling, slowed up activity, constant fatigue and lack of drive are all familiar to us. Recently, mononucleosis has been reported to exist in a chronic state. The atypical symptoms of lack of energy, asthenia and lassitude in this condition so far have defied therapeutic approach. The constant battle regarding the diagnosis of chronic brucellosis with its legion of varied complaints still reigns. Modern thought indicates that the positive blood culture and the elevated agglutination titer are the only sound means of classifying a person's so-called functional complaints as due to this entity. Lastly, migraine, tuberculosis, Addison's disease, and a host of other conditions may manifest themselves in their early stages by tricky complaints simulating psychosomatic illnesses.

DISCUSSION

This is not an effort to defend the organicist in his approach to medicine nor to defend the physician who attributes his patient's nervousness, anxiety and fatigue to a blood sugar of 70 or a hemoglobin of 70 per cent. This is an effort to bring balance to diagnostic thinking. The well-rounded physician will have the judgment, medical knowledge, and clarity of observation to suspect an obscure organic disease when confronted with atypical symptoms of a psychic nature. It is not intended to recommend that every patient should have elaborate, time-consuming and costly laboratory studies. Rather, it is suggested that an open mind be kept about patients and their problems, and that each individual patient be considered in the light of his own complaints.

SUMMARY

1. A variety of organic illnesses present early symptoms suggesting psychic disorders.

2. Among these the most prominent are multiple sclerosis, myxedema, carcinoma of the pancreas, minor cerebral vascular accidents, allergic toxemia, hyperparathyroidism, and myasthenia gravis. These are discussed, and several others mentioned briefly.

3. Care is recommended in differentiating these conditions from emotional disease.

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ANNOUNCEMENTS

N. J PSYCHIATRIC MEETING

The annual C. C. Beling Memorial Lecture, sponsored by the New Jersey Neuropsychiatric Association, will be given on November 11, at 8:45 p.m. at the Academy of Medicine of Northern New Jersey in Newark.

Dr. Winfred Overholser will speak on medical expert testimony and its improvement. Dr. Overholser is Professor of Psychiatry at the Georgetown University School of Medicine, Superintendent of St. Elizabeth's Hospital, and formerly president of the American Psychiatric Association.

Those who wish may also come for cocktails and dinner at 6:30 p.m. which will be served preceding the meeting ($5.00). For dinner reservations or further information, apply to: J. Lawrence Evans, Jr., M.D., Secretary, New Jersey Neuropsychiatric Association, 240 E. Palisade Avenue, Englewood, N. J. (Englewood 4-0889).

All members of the profession are cordially invited.

MEDICAL CENTER ALUMNI

The Jersey City Medical Center Alumni Association announces its sixth annual meeting on Friday, November 20, at the Medical Center. Chemotherapy of infections will be the topic of the scientific portion of the program. An alumni dance will be held at the Hotel Plaza, Jersey City, the same evening.

CHEST PHYSICIANS MEETING

The New Jersey Chapter of the American College of Chest Physicians announces that a scientific meeting will be held at Bonnie Burn Sanatorium, Scotch Plains, on Tuesday, November 24, at 8:30 p.m. Dr. Herbert C. Maier, Director of Surgery, Lenox Hill Hospital, New York City, will discuss mediastinal tumors.

Arrangements have been made for a bus from the Sanatorium to meet the Jersey Central trains arriving at Fanwood at 7:32 and 8:30 p.m. for physicians who wish to travel by rail.

GENERAL PRACTICE SESSION

The New Jersey Academy of General Practice will present its second annual scientific session on Wednesday, December 9 at the Hotel Essex House in Newark. The program will be devoted to a presentation of office diagnostic and treatment methods in upper gastrointestinal disturbances (for details of the program, see advertisement on page 5A). All interested physicians are invited; there is no registration fee.

EIGHTEENTH MARTLAND LECTURE

The eighteenth annual Harrison S. Martland Lecture will be presented at the Academy of Medicine, 91 Lincoln Park, Newark, N. J., at 9:00 p.m., December 9. The speaker will be Paul Klemperer, M.D., Pathologist to Mt. Sinai Hospital, New York, and Professor of Pathology at Columbia University.

This lecture will be presented before a combined meeting of the Essex County Pathological and Anatomical Society, the Essex County Medical Society, and the Academy of Medicine of New Jersey.

TUMOR SEMINAR

The New Jersey Society of Clinical Pathologists will hold its third annual slide seminar on unusual tumors at the Presbyterian Hospital in Newark on December 12 at 2:00 p.m. Slides and case histories prepared by the Bureau of Pathology, New Jersey State Department of Health, are being sent to all members of the Society for previous review. Doctors Fred Stewart and Frank Foote, Jr. of the Memorial Center, New York, will act as moderators. All interested physicians are invited to attend.

E. E. N. T. SEMINAR

The University of Florida announces its eighth annual midwinter seminar in ophthalmology and otolaryngology to be held at the Sans Souci Hotel, Miami Beach during the week of January 18, 1954. Prominent lecturers from national medical centers will lead the discussions.

OBITUARIES

MAX DANZIS, M.D.

Dr. Max Danzis died in Newark on October 20 at the age of 79.

Dr. Danzis was born in Russia, and came to the United States in 1890. He was graduated from the New York University Medical School in 1899, following which he began the practice of medicine and surgery in Newark.

Dr. Danzis was co-founder of the Newark Beth Israel Hospital in 1901, becoming chief of staff at the hospital in 1920, a position he held until his retirement in 1940. He was awarded the first Unico national award in 1950 and the Dr. Edward J. Ill award in 1941. In 1949 the Max Danzis Medical Education Foundation was organized in his honor by a group of Newark physicians. In the same year Dr. Danzis was appointed adviser to the University of Palestine; he also served as a trustee of Newark University and the American Hebrew University of New York. He was a trustee and past president of the Academy of Medicine of Northern New Jersey, a fellow of the American College of Surgeons, past president of the New Jersey Society of Surgeons, a charter member of the American Board of Surgery, and past president of the Essex County Medical Society.

In 1941 Dr. Danzis was a candidate for the position of Essex County freeholder.

Dr. Danzis was not only an actively practicing surgeon but also wrote several medical papers and was active in civic affairs of his community. He had been on the staff of the Newark City Dispensary and held an executive position on the staff of St. James' Hospital.

DR. CHARLES L. FLEMING

Dr. Charles L. Fleming died at his home in Penns Grove on September 13 at the age of 68.

Dr. Fleming was a graduate of Hahnemann Medical College in 1906, following which he studied for one year in Vienna. He had been in practice in Penns Grove since 1910. He was an associate member of the Pediatric Society of Philadelphia, and consultant at the Salem County Memorial Hospital.

Dr. Fleming was active in fraternal affairs in his community and had been a director of the Penns Grove National Bank and Trust Company.

JOSEPH F. LONDRIGAN, M.D.

Dr. Joseph F. Londrigan of Hoboken died on October 17 at the age of 69.

Dr. Londrigan was born in Hoboken in 1884 where he received his early education in parochial and public schools. Following his graduation from the University of Pennsylvania Medical School in 1910, Dr. Londrigan served as an intern at St. Mary's Hospital, Hoboken. In 1911 he began the practice of medicine in that city and in 1920 was elected medical director of St. Mary's Hospital medical staff.

Dr. Londrigan served as president of the Hudson County Medical Society in 1925, as a member of the Board of Trustees of the state society 1941 to 1945, delegate to the American Medical Association 1947 to 1953, chairman of the Veterans Liaison Committee 1946 to 1950, chairman of the Honorary Membership Committee 1949-1950, and executive secretary to the Legislative Committee 1950 to 1953.

Dr. Londrigan was also on the staff of North Hudson Hospital, Weehawken as consulting surgeon and of Jersey City Medical Center.

DR. CLAUDE B. PHILLIPS

Dr. Claude B. Phillips of Collingswood died on September 1 at the age of 61.

Dr. Phillips was graduated from Hahnemann Medical College in 1922. Following internship he practiced medicine in Collingswood for a period of thirty years.

Dr. Phillips was active in religious and civic affairs in his community.

ADOLPH WEGROCKI, M.D.

Dr. Adolph Wegrocki died at his home in Newark on September 27 at the age of 53.

Dr. Wegrocki was born in Kingston, New York and was a graduate of Temple University School of Medicine in 1927. After spending one year at the Universite de Paris, France, he served an internship at St. Michael's Hospital, Newark. He also served on the resident staff of Essex Sanatorium and Essex County Isolation Hospital.

Dr. Wegrocki was a practicing physician in Newark at the time of his death. He was a member of the surgical staff of Presbyterian Hospital and medical director of the Newark plant of the United States Steel Supply Company. Since 1943 he had been assistant surgeon for the Newark Fire Department.

In addition to his career as a physician Dr. Wegrocki was active in civic affairs. In 1938 he was elected to the New Jersey Assembly from Essex County, a position he held until 1942. He was also active in Polish cultural and political groups and was among the founders of the Polish Republican Club of Essex County, the Polish Arts Club of Newark and the Amphers, an organization of policemen and firemen of Slavic extraction.

In 1938 he was awarded the gold service cross by the president of Poland for his activities on behalf of Polish culture.

LETTERS TO THE JOURNAL

Dear Editor:

The letter which appears below was given to me by Mr. Carlton R. Hopkins, Principal of the Camden High School. It should be of interest to your readers, because, although written 142 years ago, it contains excellent advice for a patient suffering from hypertension and obesity. You will note particularly the diet which generally conforms to present-day notions of a low cholesterol low salt intake.

Sincerely,
Hyman I. Goldstein, M.D.

14th March 1811

To John Tweedie

Sir:

As I understand that your brother proposes to return to his own home in the course of a few days, I beg to suggest a few observations to him respecting the mode of managing his diet as well as some other circumstance regarding his health and I trust that you will have an opportunity of forwarding them to Mr. Reid. I must observe, however, that my suggestion must first be submitted to Mr. Young, Mr. Reid and Mr. Brydon as they are the best judges how far it may be proper to restrict your brother in some things, or to give him some latitude in others.

From your brother's habit of body and general appearance, it is quite obvious, that he will be more liable to suffer from diseases arising from a *too large* than from those proceeding from a too small quantity of blood. The truth of these remarks has been demonstrated by his recent indisposition which was unquestionably a very severe shock of apoplexy. This disease, as formerly explained to you, and as he ought now to know, is occasioned by a larger quantity of blood being sent, with greater violence than usual, into the substance and centre surface of the brain, and as he ought also to be aware that he has been more favoured than most Patients under similar circumstances, as nine tenths of those seized with apoplexy die within a few hours after the first shock. For you may easily conceive, that when a blood vessel in the Brain is distended as much as to press on this tender organ, and to produce by this pressure a temporary loss of motion and sensibility, these effects will most probably become permanent if the blood vessel shall burst, and that this last does happen in the greatest number of cases has long since been ascertained.

As your brother has recovered from his late attack, it now becomes so much our duty to point out to him the means that are known to be the most effectual in warding off a renewal of the disease, as it is his duty and I make no doubt his inclination, to second us, by pursuing most willingly, zealously, consciensiously these measures now to be suggested to him. As an encouragement for him to live by rule, I can assure him, that *apoplexy* may be prevented with as much certainty as the *gout* and with more certainty that the *gravel,* by perfect temperance and sobriety and proper exercise, while it (apoplexy) is the necessary consequence, in one who has once been afflicted with it, either of an accidental debauch or of systematic full living.

I must observe here, however, and I beg you will explain to him, that *Debauch* and *full living,* are relative terms, for to some constitutions, a meal of rich cream, taken before breakfast, or a meal of strong broth or Jelly taken between breakfast and dinner is as notorious a *Debauch,* as *two quarts* of wine or Four Quarts of ale or Porter would be to another. Everything depends on the disposition of a Person's Constitution, to the rapid production of blood and to the facility with which it is conveyed to the Brain, or the difficulty it has in finding its way to the extreme parts of the body. If it cannot get freely to the legs and arms and Bowels on account of a patient's being very corpulent then it must go too easily to the Brain, and there produce all its hurtful influence.

Now I know well that your Brother is an exceedingly correct man and as the times are, is most mentoriously temperate. Still he is more *corpulent,* more full of *flesh* and *blood* than he ought to be, and his late illness proves this assertion.—He must therefore endeavor to reduce himself in bulk.—By so doing he will lessen the quantity of blood formed as well as the tendency it has towards the head, while he will thus increase his muscular *strength,* and his capacity for every kind of bodily and mental exertion. Having thus briefly stated the principles on which the method of treatment is founded, I will proceed to the application of them—

1. Your brother should go to bed every evening at half past ten, and should be out of it by half past five in summer, and before seven in winter.

2. He should sleep in a well sized apartment on the second floor, in a bed with a straw mattress and straw palliup below it, but no down or feather bed, and no greater quantity of bed clothes, than is just sufficient to prevent him feeling cold.—I presume one pair of English Blankets in winter, and half a pair in summer, will answer this purpose sufficiently. If he shall feel cold with these at any time, he may have a bottle of warm water put to his feet.

3. He should wear flannel drawers, and waistcoat and worsted stockings during the day next to the skin, and in the night time, he ought to substitute a cotton shirt in their stead.

4. He ought to take a sufficient quantity of regular exercise in all seasons when the weather per-

mits; but he must not fatigue himself. Neither must he take violent exercise. He should also avoid being exposed unnecessarily in cold, rainy, foggy, inclement weather and if he has got wet, he should change himself when he returns home. On the same principle, he should avoid every occasion of getting into any personal dispute or altercation and of being agitated, or rendered anxious, as also all crowded meetings in small confined apartments, as all of these have a greater or less disposition to send the blood to the head.

5. His diet requires particular attention, in general he must lessen the allowance of *animal* food and his liquid nourishment and must make use chiefly of solid vegetables.—For *breakfast,* which he should take at nine in the morning, he may have a pint (English) of thin oatmeal or barley meal porridge, and a half pint of butter-milk or skimmed milk, or he may have five ounces of toasted wheaten bread and half a pint of weak tea or skimmed milk. For dinner at three o'clock he may have three days in the week the wing or leg of an ordinary sized barnyard fowl and on the other four days a piece of white fish or a bit of butcher meat plainly boiled or basted equal in size to the . . . of a fowl. The remainder of his dinner should be composed of half a pound by weight of boiled potatoes or rather a larger quantity of spinach, broccoli, cauliflower, mashed turnips or any other vegetable of the season well boiled. During dinner he may drink from half a pint to a pint English of toast water, water that has been boiled and cold again, barley water, whey or lemonade—I need hardly add that he should taste no distilled, nor fermented liquors of any kind and that he should have no broth nor soup, nor fat meat, nor butter, cheese, cream or rich milk, no smoked nor salted meat or fish, no salmon, goose or boiled fowl, no pastry, dumplings, nor in short anything containing butter.—Sometimes when he pleases, he may have as variety a bit of rice or bread pudding for dinner instead of his animal food—he should have no tea in the afternoon, and if he takes any *supper,* which he is better without, he may have a crust of bread with a glass of toast water, or a quarter of a pint of barley meal porridge with as much skimmed or butter milk—

6. He should take care to keep his bowels always in a fully open state, by which I mean that he should have at least one full easy motion in the day—I know no better medicine than the *artificial* mineral water which he has been taking for some time and for which I enclose a prescription which may be taken every morning after breakfast, for a week, and after that occasionally as it shall be needed.

7. Lastly Mr. Tweedie should keep his head constantly shaved, and should make use of the shower bath, every morning both in summer and winter, immediately after getting out of bed.

These are the chief points that occur to me at present, as requiring to be noticed respecting the manner of your brother's health. Should any circumstance take place at any time, on which he wishes to have my opinion I will be most happy to communicate with him through the medium of his friend Mr. Reid—Pray offer him my kindest regards and believe me.

MR. GEO. BELL, Surgeon,
Edinburgh.

The Artificial Mineral Water
Sulphatis Magnesia oz. i Aquae oz. iii
Sulph: Potas. with Sulphuric dram i

COUNTY SOCIETY REPORTS

ATLANTIC

Leonard B. Erber, M.D., Reporter

A regular meeting of the *Medical Society of Atlantic County* was held at the Traymore Hotel, October 9, Dr. E. Harrison Nickman presiding.

The following applicants were elected to membership: associate, Drs. Daniel R. DeMeo and George C. Godfrey; regular, Dr. Samuel Dinenberg, transfering from the Chester County, Pa., Medical Society; courtesy, Louis Stritzler and Jack Hollander, Ph.G.

The society was honored in having for its guests many members of the Atlantic County Bar Association and their wives. The meeting was also attended by the members of the society's auxiliary.

The guest speaker was Dr. A. M. Ornsteen, Clinical Professor of Neurology, University of Pennsylvania Medical School, who spoke on the physician in court.

Dr. John P. Milligan, general chairman of the Community Chest drive, spoke to the society and stressed the individual responsibility of the members in supporting these worthy charities.

BERGEN

John E. McWhorter, M.D., Reporter

The *Bergen County Medical Society* held its regular meeting at Bergen Pines Hospital, Paramus, on September 15, with Dr. Winton H. Johnson in the chair.

The following were elected to membership: associate: Drs. Merlin K. DuVal, Jr., S. Lawrence Jukofsky and J. Richard Mazzara; associate to regular: Drs. Christopher Babigian, Joseph A. Caltabiano, Richard J. Clifford and William R. Maurer, Jr.; courtesy: Dr. Preston Price; regular membership by transfer: Dr. Peter James Dulligan, Jr., from New York.

The guest speaker of the evening was Philip Thorek, M.D., Associate Clinical Professor, Department of Surgery, University of Illinois College of Medicine, who spoke on the acute abdomen.

BURLINGTON

William F. Betsch, M.D., Reporter

The first meeting of the 1953-54 season of the *Burlington County Medical Society* was held on September 10, at the Riverton Country Club. Dr. Freeman W. Metzer, president, presided.

Dr. John R. Wolgamot, chairman of the Program Committee, introduced the speaker of the evening: Perry S. MacNeal, M.D., Physician-in-Chief, Burlington County Hospital, Mt. Holly, whose paper was entitled "The Differential Diagnosis of Functional and Organic Disease."

CAMDEN

Frederick W. Durham, M.D., Reporter

President Edwin R. Ristine of the *Camden County Medical Society* called the regular monthly meeting to order on October 5, at the Camden Dispensary Building.

A most enlightening and summarizing talk on the growing problem of geriatrics, was given by Dr. Richard A. Kern, Professor of Medicine at Temple University School of Medicine.

Memoirs on the deaths of Dr. E. Walton Clark and Dr. Robert S. Gamon were presented and made a part of the permanent record of the Society.

CUMBERLAND

George F. Risi, M.D., Reporter

The October meeting of the *Cumberland County Medical Society* was held at the Centerton Inn, Centerton, on October 13, with Dr. Kurt M. Hansen presiding.

A final reading and adoption of a revision of the constitution and by-laws took place, the new by-laws allowing associate membership for physicians who have practiced medicine in Cumberland County for less than one year.

Dr. Miles E. Drake and Dr. Harry B. Walter, Jr., of Vineland were accepted as active members.

MORRIS

Albert Abraham, M.D., Reporter

The *Morris County Medical Society* held its regular meeting October 15 at the Warner-Chilcott Laboratories, Morris Plains.

The members were addressed by Dr. Henry Doubillet, Associate Professor of Surgery at New York University College of Medicine, who discussed pancreatic disease, particularly pancreatitis and the relation of gallbladder disease to pancreatic disease.

SOMERSET

C. S. McKinley, M.D., Reporter

On October 8, the *Somerset County Medical Society* held its annual dinner dance at the Twin Brooks Country Club, Watchung.

Following the dinner Dr. Frank L. Field was honored for having completed sixty years in the active practice of medicine. Dr. Henry Decker, President of The Medical Society of New Jersey, was present and spoke in honor of Dr. Field.

A letter from Dr. Currier McEwen, Dean, College of Medicine, New York University—Bellevue Medical Center was read and Dr. Field was presented with an engraved plate on behalf of the Somerset County Medical Society.

UNION

Merton L. Griswold, Jr., M.D., Reporter

The members of the *Union County Medical Society* gathered for the annual outing on September 23, at the Richmond County Country Club, Dongan Hills, Staten Island, N. Y. Fishing from a chartered boat and golf were enjoyed by the members. In the evening an informal dinner was served at the club house.

The regular meeting of the society was held on October 14, at the White Laboratories in Kenilworth. During the business session Dr. Herschel Murphy reported on the status of the incorporation of members' names in the classified section of the telephone book. It was voted that the society would not endorse the principle of listing physicians by any classification, specialty or otherwise.

The following candidates were elected to full membership in the Society: Doctors Colleen E. Haberstroh, Emil A. Kratzman, Philip A. Labate, Plainfield; Edward B. Whitesell, Summit; Igino Grossi, Elizabeth; William L. Fidler, Cranford; and Gloria O. Schrager, Westfield.

The subject for the scientific session was "Psychiatric Services in Union County." The panel consisted of the president of the Mental Hygiene Society of Union County, Mrs. Arthur Ackerman, and four psychiatrists from the county: Drs. Joseph Judd, Jr., Arthur T. Colley, Roland D. Roecker, and Fred F. Senerchia.

NEW JERSEY ORTHOPAEDIC SOCIETY

William Kruger, M. D., Secretary

The *New Jersey Orthopaedic Society* held its eighth annual meeting on October 10 at the Monmouth Memorial Hospital, Long Branch. The following officers were elected:

President—Henry H. Kessler; *President-elect* — John J. Flanagan; *Secretary*—William Kruger: *Treasurer*—Harold T. Hansen.

Members of the Society presented a program consisting of the following papers: Hereditary Contractures of Elbows and Absence of Patellae. Harold C. Benjamin, Jersey City; Neonatal Fractures, Andrew Dedick, Red Bank; Orthopedic Experiences in Korea, Edwin J. Otis, Long Branch; 180 Degree Rotation of Leg on Knee with Calcaneo-Valgus Deformity of Feet, Joseph Deitz, Trenton; Osteogenic Sarcoma with Metastasis; 8-Year Follow-Up of a Case, Raphael R. Goldenberg, Paterson: Anatomical Factors Related to Severity of Root Compression by Disc, Edward B. Schlesinger, New York City.

Several cases of interest were presented by the orthopedic staff of Monmouth Memorial Hospital.

WOMAN'S AUXILIARY

YOUR HELP IS NEEDED

Mrs. Oswald R. Carlander, Chairman, American Medical Education Foundation

Recently the National Committee for the American Medical Education Foundation of the Woman's Auxiliary to the A.M.A. listed some salient facts and figures about medical education and the financial problems involved. Likewise they outlined a worthy solution to this problem and suggested the technics and directives by which the objectives of the A. M. E. F. can be reached. Here they are:

Facts and Figures

Seventy-nine medical schools train doctors for 158 million people.

Sixty-five hundred doctors are graduated every year.

Cost of training a doctor today is $10,000 to $12,000.

Tuition fees pay only one-fifth of the doctor's education.

Medical schools take 40 per cent of the total university budgets but enrollment is only 10 per cent of the total number of students.

The 1953 estimated deficits for medical schools is $19,000,000.

Solution

The A.M.A. proposed to raise funds to relieve the financial difficulties now confronting our medical schools by voluntary gifts. They are doing this so that it will not be necessary to: 1) Lower teaching standards. 2) Reduce the number of doctors graduated. 3) Take subsidies from the government. To rely upon federal support invites government domination of medical education which is against our American tradition.

We Auxiliary members have pledged ourselves to help the A.M.A. in this most important and worthy cause.

The Woman's Auxiliary to the A.M.A. again contributed $10,000 from its treasury and individual members gave over $22,000 in 1953; 41 states participated. Our goal remains the same: Every auxiliary a contributor.

Technics

Auxiliaries successful in raising money for the American Medical Education Foundation report a few methods:

Using A.M.E.F. corsages in place of real flowers at parties, meetings, etc.

Getting members to make a sacrifice to give money to the fund. Example: Give difference in cost of a thrift luncheon.

Have a special event one day this year and give proceeds from fashion show, card party or dance.

A contribution from the individual members of the auxiliary, a memorial or tribute or anniversary gift. This year the state presidents and A.M.E.F. chairmen will be supplied with "in memoriam" cards.

Individuals are urged to make a gift to A.M E.F. in memory of a departed friend instead of sending flowers to the bereaved. Thus, the "in memoriam" cards may be sent to the family of the deceased immediately.

Directives

Individuals and auxiliaries should send their donations through their state auxiliaries.

These chairmen in turn, will forward the money to the American Medical Education Foundation, 535 North Dearborn Street, Chicago, Illinois, not later than May 1, 1954.

Checks may be earmarked for any of the 79 approved medical schools and every individual contribution is deductible in computing taxable net income.

Last year The Medical Society of New Jersey presented a gift of $25,000 to the A.M.E.F. Our auxiliary gave $58.00. For 1953-54 let us strive to have one dollar for every auxiliary membership for this fund. If our goal is achieved, our organization not only will have rendered a great service, but it also will be stronger. We shall be bound more closely together by the fellowship of working for a worthy cause. Your help is needed.

AUXILIARY REPORTS

Cape May County

Mrs. Paul L. Yingling, Publicity Chairman

A special meeting of the *Woman's Auxiliary to the Cape May County Medical Society* was held at the home of Mrs. Millard Cryder, Cape May Court House, on September 8. Plans were made for a smorsgasbord to entertain the county medical society and guests, on Sunday, November 1, at the home of Dr. and Mrs. G. M. Brooks, Cape May Court House.

We were all pleased to learn that Miss Patricia Toy of Dias Creek, who won the county medical society-auxiliary nurse's scholarship, entered Jefferson School of Nursing on September 8.

Essex County

Mrs. Harry E. DiGiacomo, Chairman, Press and Publicity

Mrs. Stuart Z. Hawkes, president of the *Woman's Auxiliary to the Essex County Medical Society* held the reorganization board meeting at her home in Boonton on June 10.

The blood bank at Newark City Hospital functioned during the summer under the guldance of the chairman, Mrs. Irving Borsher.

Mrs. Samuel Jessurun, medical history chairman, has completed her annual project. She collects the biographies, newspaper clippings and obituaries of doctors of the Essex County Medical Society.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

Steps Forward in Mental Hospitals. Edited by Daniel Blain, M.D. Proceedings of the 1952 Mental Hospital Institute. Pp. 243. Washington, D. C., American Psychiatric Association. (Price not stated)

Doctors in any specialty society frequently ask: "What is this organization really doing to help advance the specialty?" And with some societies, the answer may have to be: "Practically nothing." No such charge can be made against an organization that has, for the fourth year now, operated and reported on a down-to-earth project like the Mental Hospital Institute.

The institute here reported—like its three predecessors—was a forum for the exchange of ideas. It operated on a highly practical, over-the-counter level. And here is the edited transcript of this practicum. The editors have wisely preserved the informality, warmth, and colloquial language of the seminar as it occurred, but have smoothly edited out simple repetition.

The result is a homely but very useful review of many facets of hospital psychiatry. Here you will find workable discussions on the washing of plastic dishes, the use of the new nomenclature, the care of epileptics, the role of the chaplain, the laundering of patients' clothing, the support of research, the ideal size of a ward, technics for following-up a patient, etc.

To anyone with a professional or personal interest in the public or private mental hospital, this book, like its three predecessors, will be informative, lively and useful. What it lacks in comprehensiveness it makes up in practicalness.

HERBERT BOEHM, M.D.

The Physician in Atomic Defense. By Thad P. Sears, M.D., Associate Clinical Professor of Medicine, University of Colorado School of Medicine. Pp. 308. Chicago, Year Book Publishers, Inc., 1953. ($6.00)

Whether or not one believes a destructive attack from the air upon our cities can happen here, whether one is a medical man or a scientist, the atomic age is here with its industrial and scientific potentialities, even certainties, so far beyond calculation as to astound us with its magnitude.

Dr. Sears has put together in concise and interesting form the pertinent essentials of the physics of the atom, the atomic bomb, atomic energy and useful isotopes. He has achieved in this volume, in a most profitable manner for the reader, an understanding of present physical concepts of matter and radioactivity without recourse to cumbersome mathematical formulae.

This book arouses the physician from a sense of complacency regarding civil defense through its expertly studied review of the destructive elements of atomic war and presents a well-developed organization for atomic defense. It also opens the door to a whole library of atomic material which heretofore had been top secret.

This compilation provides a scientific history of nuclear physics, the mechanism of the atom, the definition of fission factors, the analysis of radioactive elements, and principles of radioactive measurements.

One is constantly amazed at power potentialities of the splitting of the atom, not only as regards the many radioactive elements, but in respect to the splitting of other elements which will soon offer to civilization new sources of heat, power, light, and other energies in useful form.

In addition to the industrial physician and radiologist, anyone who wishes to keep pace with the times and familiarize himself with the symptoms, pathology and treatment of radioactive effects, as well as the medical and scientific potentials of the future, will find this book offers insight into all phases of the atom, its development and fission and its relation to destruction, disease and defense.

GERALD I. CETRULO, M.D.

Twenty-Five Years of Sex Research. (History of the National Research Council Committee for Research in Problems of Sex, 1922-1947). By Sophie D. Aberle and George W. Corner. Pp. 248. Philadelphia, W. B. Saunders Company, 1953. ($4.00)

For purposes of clarification the title and subtitle of this book should be reversed. The uninformed reader might well assume that it is a digest of 25 years of scientific research whereas it is actually a history of the National Research Council Committee dealing with problems of research. It is published with the "hope that it will be useful to others charged with the management of research programs and funds." It does, therefore, aim to portray what the committee has learned about administrative problems and only in a very minor way does it describe actual scientific contributions.

The general trend of scientific research is well portrayed and a thorough reading gives a clear and concise picture of the scope and magnitude of the project.

The authors do not attempt to include research projects that have gone on outside of the authority of the committee. The bibliography is thus devoted entirely to papers and publications sponsored by the National Research Council, a formidable and impressive listing, but restricted in scope. It is well put together, well written and direct in approach. It will be of little value to the general reader but of considerable value to administrators of research funds and those interested in extending research programs into the problem of sex.

LEWIS H. LOESER, M.D.

Familial Nonreaginic Food-Allergy. By Arthur F. Coca, M.D. With contributions by 9 authors. 3d ed. Pp. 279. Springfield, Ill., Charles C. Thomas, 1953. ($10.50)

The author of this monograph is a pioneer in the field of allergy. His original writings, especially his contribution on hypersensitiveness, anaphylaxis, and allergy, which comprised the first part of the work in three parts entitled, "Asthma and Hay Fever in Theory and Practice," (1931), have been acknowledged by medical men everywhere. The concept that is presented in this volume, however, has not been widely accepted.

The concept of familial nonreaginic food allergy or idioblapsis (as he terms it) is one in which the diagnosis is made if a patient has a pulse rate of 88 or more at any time or if a daily range exceeds 20. An increase of several beats after ingestion of trial food indicates an allergy to that food.

Dr. Coca suggests that such conditions as hypertension, glaucoma, multiple sclerosis, epilepsy, carcinoma of the breast and, possibly, poliomyelitis, are due to idioblapsis or food allergy.

Although this book makes interesting reading, it is not recommended for the general practitioner. There is too much unsupported theory, and the interpretation of the pulse-diet record is too involved for general usage. In addition, the treatment recommended for these conditions, histamine injections and sympathectomy, has not been accepted by workers in the field of allergy and medicine.

WILLIAM GREIFINGER, M.D.

Clinical Electrocardiography in Children. By Gertrude H. B. Nicolson, M.D., Instructor in Pediatrics at Columbia University. Pp. 100. New York, The Macmillan Company, 1953. ($3.25)

There seems to be little disagreement among cardiologists that pediatric cardiology represents one of the most difficult phases of this specialty. Thus, a textbook devoted to electrocardiography in children, especially one that is short, succinct, and easy to read represents a real contribution.

There has been confusion about normal rates in children, standard deviations of various measurements, what represents an abnormal finding in an infant's tracing, and a host of other problems. These and many other helpful points are brought out in this book. The appendix contains many tables of normal standards, which should be at the right hand of every electrocardiographer. The chapter on the electrocardiogram in congenital heart lesions is outstanding. A clear discussion of the Katz-Wachtel phenomenon on page 59 is especially illuminating.

One could have hoped for better clarity in the electrocardiographic tracings reproduced. Some of them are rather hazy and a little time is necessary to see the salient points. Otherwise, the material is accurate and essential. This book is recommended to all physicians interested in pediatric cardiology.

A. D. DENNISON, JR., M.D.

Cornell Conferences on Therapy, Volume 6. Edited by H. Gold., M.D., *et al.* Pp. 287. New York, The Macmillan Company, 1953. ($4.00)

The sixth volume of the *Cornell Conferences on Therapy* maintains the same high standards as previous issues. This relatively short book presents the reader with the transcribed and edited proceedings of the therapeutic conferences which began at the New York Hospital—Cornell Medical Center sixteen years ago. These conferences were published in the Journal of the American Medical Association from 1937 to 1940, in the New York State Journal of Medicine from 1940 until 1946 and from that year until the present they have been published both in the New York Journal and the American Journal of Medicine. The present volume contains the reports of fifteen such conferences.

Commendation is due the editors of this book for their perspicacity in selecting items of general medical interest. Topics discussed in the present volume are as follows: coma, vasodilating agents, anticoagulants in coronary thrombosis, leukemia, psychosurgery, antibiotic combinations and many others.

Each conference attempts to present a well rounded view of the problem under discussion. However, some bias is unavoidably present in view of the fact that very often a single speaker presents the major discussion. For instance, Dr. Irving S. Wright is given the place of honor in the chapter on anticoagulants in coronary thrombosis. It is widely known that if Dr. Wright's viewpoint were to prevail every patient with acute myocardial infarction would receive Dicumarol® therapy or some similar anticoagulant. An alternate school of thought however proposes greater selectivity in the use of these potent drugs. It should be stated, however, that controversial subjects are presented as fairly as possible so that the reader may decide himself which course of therapy he prefers to follow.

A valuable addition to the present volume is a list of previously published conferences on pages 285 to 287 so that the physician may know where to look for any particular topic which interests him.

R. D. Goodman, M.D.

Clinical Diagnosis by Laboratory Methods; a Working Manual of Clinical Pathology. By James Campbell Todd, M.D., Late Professor of Clinical Pathology, University of Colorado School of Medicine; Arthur Hawley Sanford, M.D., Emeritus Professor of Clinical Pathology, The Mayo Foundation, University of Minnesota; and Benjamin B. Wells, M.D., Professor of Medicine, University of Arkansas School of Medicine. 12th ed. Pp. 998. Phila., W. B. Saunders Co., 1953 ($8.50)

The authors point out that very little has been deleted from the material presented in the eleventh edition of this well-known book on laboratory methods, since the latter edition was a complete revision.

In this new edition, there are changes in the chapter on urine. The chapter on blood has been revised and rearranged. Clinical chemistry has been brought up to date. Bacteriologic methods have been arranged to make them conform to the nomenclature and arrangement of the sixth edition of Bergey's *Manual of Determinative Bacteriology.* Serologic tests for syphilis now conform to the technics published as Supplement number 22, Journal of Venereal Disease Information, USPHS.

In addition to the appendix, which presents solutions, weights and measures, temperature charts, tables of normal values, etc., there is also an "Index-Outline of Laboratory Findings in Important Diseases," in which diseases are listed alphabetically with notes on the important laboratory characteristics of each and reference to the pages where more detailed information may be found.

This manual is widely used by clinical laboratories and by medical schools. It is useful as an aid in diagnosis to the clinical pathologist, to the medical technologist, and to the medical practitioner.

Samuel A. Goldberg, M.D.

Mechanisms of Urologic Disease. By David M. Davis, M.D., Emeritus Professor of Urology, Jefferson Medical College. Pp. 156. Phila., W. B. Saunders Co., 1953. ($4.50)

This book is the result of a series of introductory lectures to third year students at Jefferson Medical College on urology. Later these lectures were combined into a syllabus for the use of students and now the syllabus, expanded and modified, makes up the present work. Chapters on male infertility, on lesions of the external genitalia, on lesions of the scrotal contents, and on the theory and practice of catheterization, have been added as well as an outline for history taking and physical examination.

The author approaches the field of urology with the basic concepts of physiology and pathology clearly in mind. He places emphasis on the fact that there are differences of opinion in urology and he has documented his work with adequate and up-to-date references. The material is presented simply and succinctly.

Irving Maisel, M.D.

Epidemiology and Control of Endemic Syphilis. By E. I. Grin, M.D., Director, Central Dispensary for Skin and Venereal Diseases, Sarajevo, Yugoslavia. Pp. 93. Geneva, World Health Organization, 1953. ($1.00)

This monograph exemplifies the high caliber of scientific medical work being sponsored by the World Health Organization which supported the publication of this volume.

While syphilis is no longer the epidemiologic problem in this country that it is in the more backward areas of Yugoslavia where most of these studies were performed, much can be learned and utilized in our efforts to extinguish the smaller smoldering foci in America.

Endemic syphilis as conceived by the men performing these studies and by the author coordinating the work for this publication has, as a rule, a non-venereal route of infection. The incidence of the disease is so high in these small backward communities that there is an ever-present possibility of being exposed to infection from patients with communicable secondary lesions, even through commonly used drinking utensils. Thus the primary infection is generally non-venereal and occurs very often in early childhood, affecting both sexes equally. Its mode of spread through common domestic utensils as well as through direct and indirect contacts frequently gives rise to oral lesions as the first manifestation, this being the portal of entry.

Here the differences end since strains of *Treponema pallida* are the causative organisms, and the epidemiologic as well as the therapeutic and laboratory data presented correspond to what we know of syphilis as seen in this country.

It is interesting to read of the high incidence of this disease and of the ease with which the fight to stamp it out can be carried out at present. As in our country, its prevalence is the greatest where the economic, social and educational standards are the lowest.

Edmond Edelson, M.D.

TUBERCULOSIS
ABSTRACTS

Supplied by New Jersey Trudeau Society

ISSUED BY THE NATIONAL TUBERCULOSIS ASSOCIATION

Vol. XXVI November, 1953 No. 11

TUBERCULOSIS SURVEY AND THE GENERAL PRACTITIONER

By I. Phillips Frohman, M.D., Medical Annals of the District of Columbia, March, 1953.

In the first six months of 1952, as a general practitioner in private practice, I took x-ray films of the chest of 89 patients in the 3 to 76-year-age group in my office and discovered four cases of active, advanced tuberculosis in patients aged 19 to 55 years, which necessitated immediate hospitalization; in addition, there were two cases of silicosis. All of these were taken on 14 by 17 film. The percentage of diagnosis was approximately 4.4.

In contrast to this let us examine the figures from a mass chest x-ray survey in this metropolitan community.

In April and May of 1952 mobile x-ray units operated throughout southeast Washington, D. C. In a period of six weeks, 10,830 chest pictures were taken on microfilm. These represented both males and females whose ages ranged from 15 to 45 years and who came voluntarily to the units. Upon examination of the films the tuberculosis association requested 511 to return to the clinic for repeat x-ray examinations on larger film; and of this number, 165 persons were studied more completely by means of sputum examination, sedimentation rate, and other diagnostic procedures. Twenty-seven cases of tuberculosis "in some form or another" were detected and, of these, exactly 10 cases of active tuberculosis were uncovered, in addition to the three cases of far-advanced tuberculosis necessitating hospitalization.

Let us consider the vast scope of the survey, the number of x-ray films made, and the amount of time (6 to 8 hours daily except Sunday) required to reveal 13 cases of active tuberculosis, three requiring hospitalization. This is approximately one tenth of one per cent, a small figure for so large an investment.

It is unlikely that either of the group x-rayed is a sample representative of the total population of this area. The group examined in the mobile units contained only the middle-age range and represented only those persons who had been reached by the publicity, who wished to come, and who were able to come. No device for random selection was employed. Likewise, the group of patients examined in my office could scarcely be considered an unbiased sample either, if for no other reason than that they were all sick people. Nevertheless, the disparity between the percentages of active tuberculosis in the two groups is sufficient cause for reflection. If three far-advanced cases are found in a public survey of 10,830 people and four such cases are found in 89 of a general practitioner's patients, which is the better place to look for possible tuberculosis?

One of the best survey areas still untapped by the physicians or other surveys is in the hospitals themselves. It should be routine and required practice to have a chest x-ray film taken of every patient admitted to any hospital. Herein is the most important of all groups for chest x-ray surveys. The potential detection of minimal tuberculosis is most important from the standpoint of complete cure and recovery, more so than far-advanced tuberculosis.

Statistical data will bear out the fact that, if a routine x-ray film of the chest were made for every patient admitted to the various hospitals, many cases of otherwise unsuspected tuberculosis would be uncovered as well as other pulmonary and cardiac diseases. The percentage rate of cases found might possibly be similar to that seen in private practice.

The general practitioner cannot afford to fail to seize his opportunity to detect these cases. He has a public responsibility to do so in light of the above figures, which indicate that if he does not, no volunteer survey will or can detect them. There are certain persons, sick and well, who will not be included in any general survey, whether it be for pulmonary diseases, cancer, heart trouble, or diabetes. These are usually the youngsters under 15 years and the older folk of 55 years and up. Such individuals generally are seen only when they become ill and seek their physicians for treatment or advice. Their complaints may be minor, but, nonetheless, this is the time to examine these patients for other diseases, and general practitioners are the ones to make such examinations. They should look for signs and symptoms other than those relating to the patient's main complaint (which often is trivial) and be alert for diseases of the lungs and other organs. Their examination should include, in addition to the physical examination, an x-ray film of the chest, a blood pressure estimation, a blood count, and a urinalysis. Only thus can the physician fulfill his obligation to the patient.

Most patients can be convinced of the value of a routine x-ray examination of the chest. Usually an indirect and casual approach is all that is necessary. Even when the consultation concerns only a simple complaint or one in no way related to the respiratory or circulatory systems, it is a rare patient who objects, for example, to a suggestion that he have his blood pressure checked, or who fails to give an amicable reply to the question, "Do you smoke?" From there one may gently lead up to the important, "When did you last have your chest x-rayed?" Such direction of the consultation can nearly always result in not only the x-ray examination, but also a urinalysis and cardiac examination.

However, this ease of persuasion cannot be attributed entirely to the physician's skill. We must thank our advertising media for creating a health-conscious public. Such tractability in patients indicates that at least part of their "sales resistance" to preventive medicine has already been dissipated. Yet it seems but a short time ago that the obstinate patient was the customary one. His refusal of each procedure suggested was almost automatic. He had to be almost herded into the x-ray room; obtaining a blood specimen or basal metabolism rates was absolutely out. The physician escaped frustration only when the patient was too sick to object, and then it was usually too late for any procedure. As recently as 1940, this sort of patient did not think laboratory procedures were worth the outlay in either time or money. It is a relief that this obstacle of ignorance is fast disappearing.

With his way being prepared for him by the publicity drives of preventive medicine groups, the general practitioner can now do more to detect unsuspected disease than can any other individual or organization. He sees 85 per cent of the medical patients in this country. He is, therefore, morally obligated to become thoroughly familiar with all feasible diagnostic procedures and equipment, to employ such procedures and equipment himself if possible, and, if not, to refer his patients to someone who can. The success of preventive medicine and the constant vigilance of the general practitioner are inescapably correlated. And this vigilance must not be sporadic—it must embrace all patients. A careful and complete history, physical examination, and x-ray examination of the chest should be as much routine as is the medical history.

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1. Greenhill, J. P.: Principles and Practice of Obstetrics, ed. 10, Philadelphia, W. B. Saunders Company, 1951, pp. 103-104; 311; 332.

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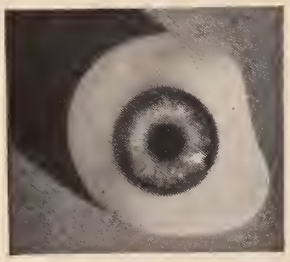
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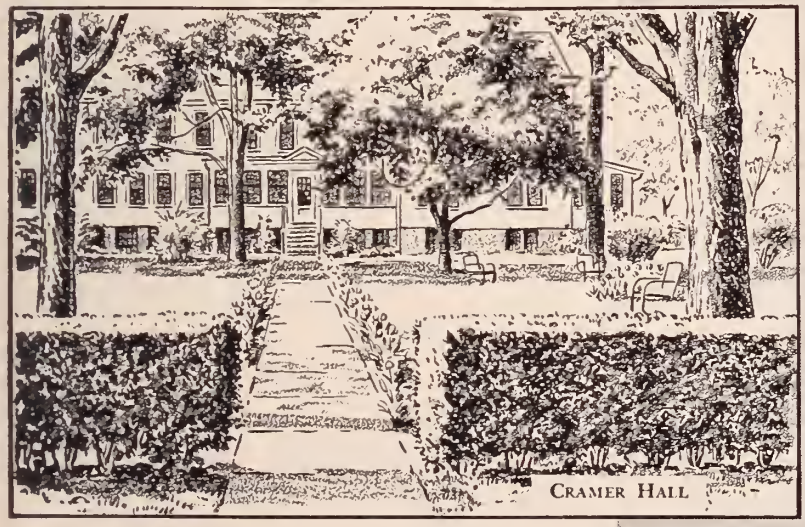
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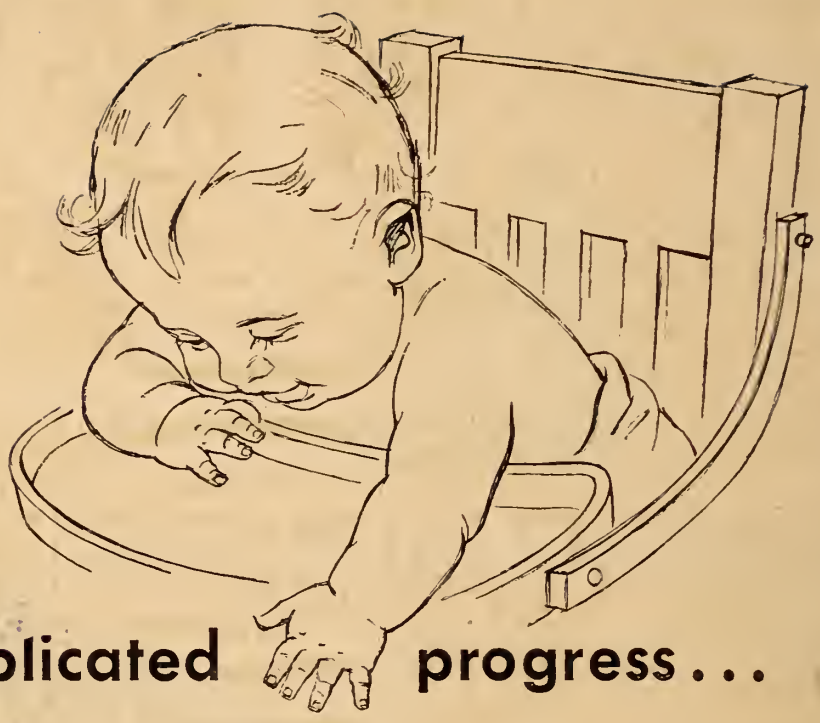
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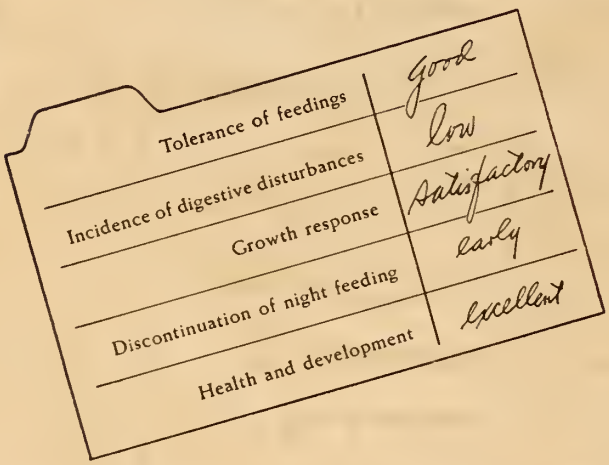
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CONTENTS—Pages 535 to 584

EDITORIALS— Page

CHRISTMAS MESSAGE 535
AERIAL REHABILITATION CENTERS 535
PERIPHERAL VASCULAR SOCIETY 536
BLOOD PRESSURE IN THE AGED 536
SEASON'S GREETINGS 537

ORIGINAL ARTICLES—

CURRENT CONCEPTS OF RHEUMATIC FEVER PREVENTION—Henry L. Drezner, M.D., Trenton, N. J. 538

PROPHYLACTIC USE OF AN ANTIHISTAMINE IN BLOOD TRANSFUSIONS—William G. Bernhard, M.D., Harold Grubin, M.D. and Mary Virginia Bryan, R.N., Newark, N. J. 542

PUERPERAL RECTAL SURGERY—Saul Zager, M.D., East Orange, N. J. 546

ELECTROCARDIOGRAPHY: ITS VALUE AND LIMITATIONS—Frank A. Marshall, M.D., Weehawken, N. J. 550

THE USE OF TRILENE IN OBSTETRICS—John S. Madara, M.D. and Benjamin H. Libien, M.D., Salem, N. J. 553

ORIGINAL ARTICLES— Page

TYPHOID FEVER—REPORT OF TWO CASES IN SUBURBAN NEW JERSEY—Albert Abraham, M.D. and Ella Cummins, M.D., Morristown, N. J. 558

SKIN ERUPTIONS OF PREGNANCY—Emanuel M. Satulsky, M.D., Elizabeth, N. J. 560

USE OF A PURIFIED NON-PROTEIN BACTERIAL COMPONENT, PIROMEN, IN ALLERGIC CONDITIONS—Solomon Aronoff, M.D., Jersey City, N. J. and Abolghassem Ghaemi, M.D., Teheran, Iran 564

MEDICAL-SURGICAL PLAN 568

ANNOUNCEMENTS 569

WOMAN'S AUXILIARY 570

COUNTY SOCIETY REPORTS 571

BOOK REVIEWS 572

ANNUAL INDEX 1953 575

TUBERCULOSIS ABSTRACTS 583

Roster of Officers and Committee Chairmen, Advertising Page 3A

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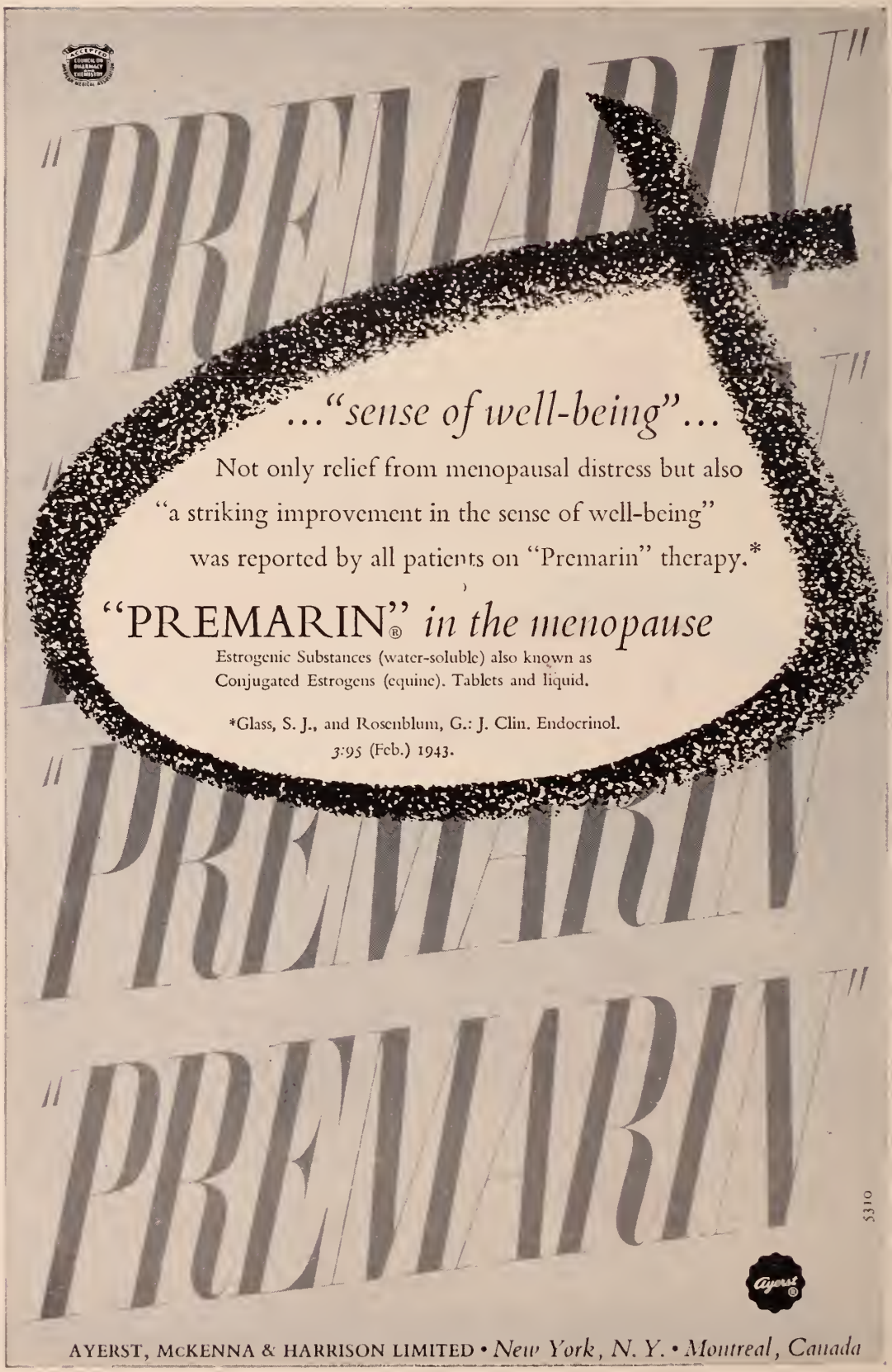


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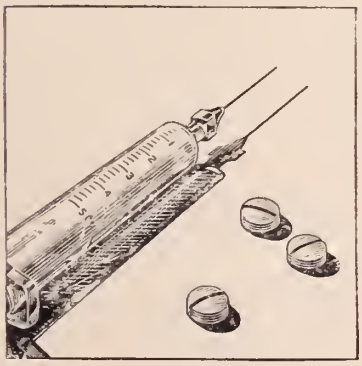
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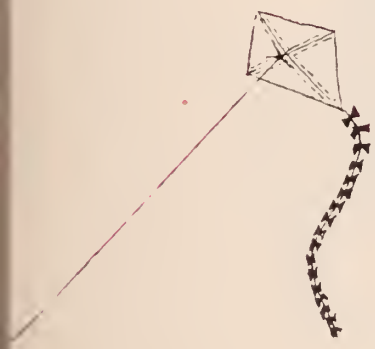
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Every 4 to 6 hours



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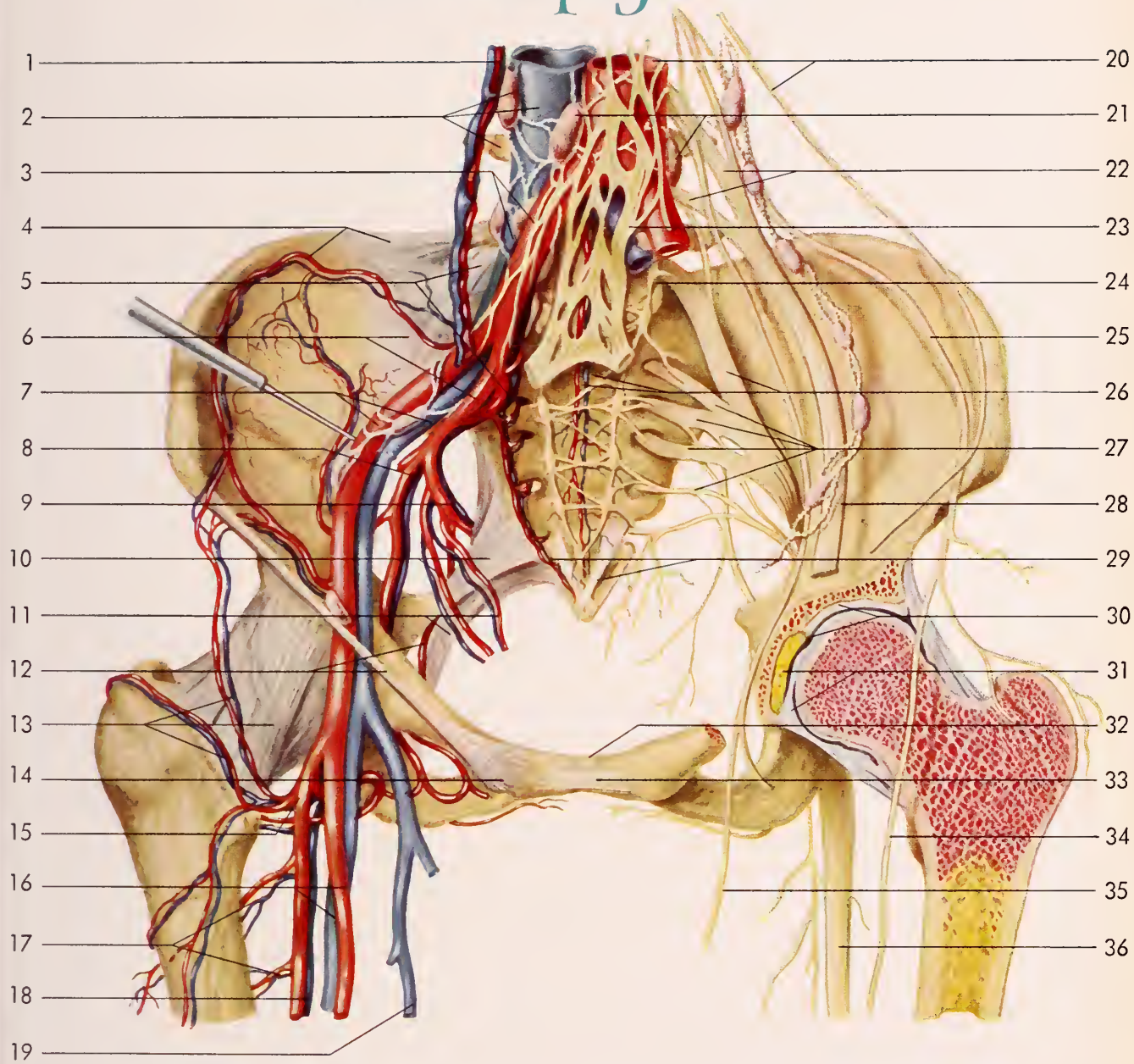
CAUTION:
Levo-Dromoran Tartrate is a narcotic analgesic. It has an addiction liability equal to morphine and therefore the same precautions should be taken in dispensing this drug as with morphine.

*Glazebrook, A. J.: Brit. M. J., 2:1328 (Dec. 20) 1952.

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Anatomy *of the* Pelvis *and* Hip Joint



1 Ovarian artery and vein
2 Vena cava; lumbar lymph nodes
3 Right common iliac artery and vein
4 Iliolumbar ligament; branches of iliolumbar artery and vein
5 Lumbosacral ligament; superior gluteal artery and vein
6 Anterior sacroiliac ligament; internal iliac (hypogastric) artery
7 External iliac artery and vein
8 Obturator artery and vein
9 Inferior gluteal artery and vein
10 Sacrospinous ligament; uterine artery and vein
11 Sacrotuberous ligament; vaginal artery and vein
12 Inguinal ligament; internal pudendal artery
13 Iliofemoral ligament; branches of lateral femoral circumflex artery and vein
14 Lacunar ligament
15 Lateral femoral circumflex artery and vein
16 Femoral artery and vein
17 Perforating arteries and veins
18 Deep femoral artery and vein
19 Great saphenous vein
20 Aorta; ilioinguinal nerve
21 Lateral aortic lymph nodes
22 Lumbar nerves
23 Hypogastric sympathetic plexus
24 Sympathetic trunk
25 Lateral femoral cutaneous nerve
26 Middle sacral artery and vein; lumbosacral trunk
27 Sacral nerves
28 Femoral nerve
29 Lateral sacral artery and vein; anterior sacrococcygeal ligament
30 Lunate articular cartilage; joint cavity
31 Acetabular fat pad; ligamentum teres
32 Interpubic fibrocartilage
33 Superior pubic ligament
34 Anterior branch of lateral femoral cutaneous nerve
35 Obturator nerve
36 Great sciatic nerve

This is one of a series of paintings by Paul Peck, illustrating the anatomy of various organs and tissues of the body which are frequently attacked by infection, where aureomycin may prove useful.

Lederle

Many infections attack the pelvic organs, as well as the surrounding bony structures.

Aureomycin*

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[1]Evans, R. R., and Rackemann, F. M.: *A.M.A. Arch. Int. Med.* 90:96–127, July 1952.



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1. Humphreys, P., et al.: Angiology 3:1 (Feb.) 1952.
2. Plotz, M.: New York State J. Med. 52:2012 (Aug. 15) 1952.
3. Perlman, A.: Angiology 3:16 (Feb.) 1952.

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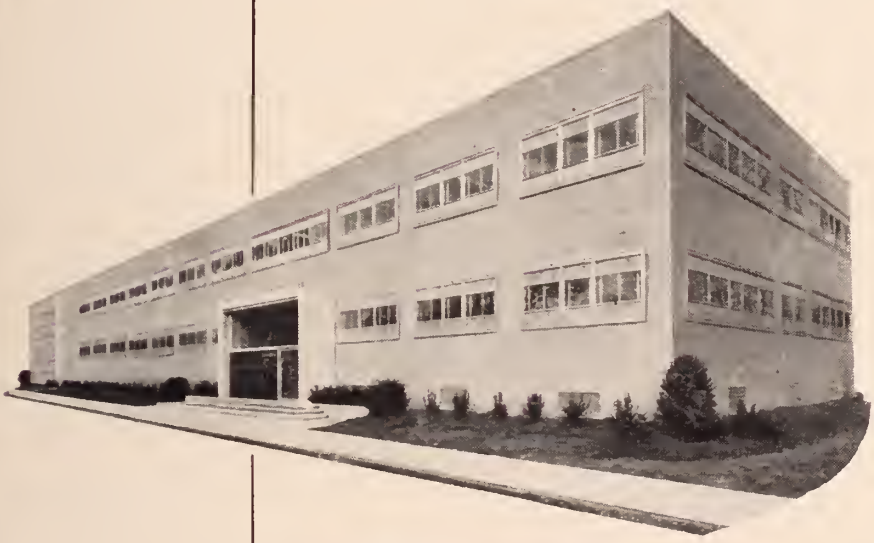
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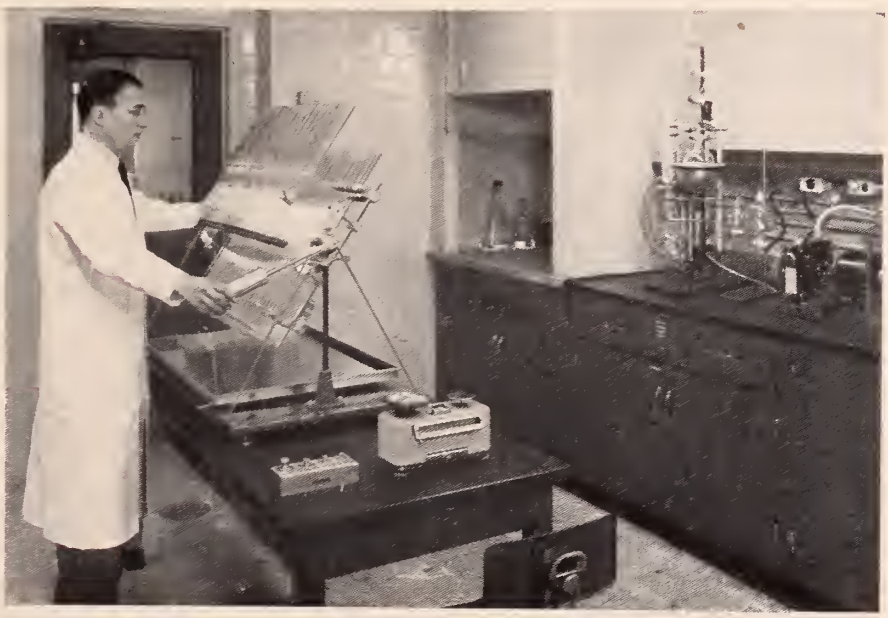


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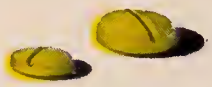
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in treating bacterial urinary tract infections

is provided in its recent

acceptance by the Council



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Nitrofurantoin is useful by oral administration for the treatment of bacterial infections of the urinary tract and is indicated in pyelonephritis, pyelitis, and cystitis caused by bacteria sensitive to the drug. It is not intended to replace surgery when mechanical obstruction or stasis is present. Following oral administration, approximately 40% is excreted unchanged in the urine. The remainder is apparently catabolized by various body tissues into inactive, brownish compounds that may tint the urine. Only negligible amounts of the drug are recovered from the feces. Urinary excretion is sufficiently rapid to require administration of the drug at four to six hour intervals to maintain antibacterial concentration. The low oral dosage necessary to maintain an effective urinary concentration is not associated with detectable blood levels. The high solubility of nitrofurantoin, even in acid urine, and the low dosage required diminish the likelihood of crystalluria.

Nitrofurantoin has a low toxicity. With oral administration it occasionally produces nausea and emesis; however, these reactions may be obviated by slight reduction in dosage. An occasional case of sensitization has been noted, consisting of a diffuse erythematous maculopapular eruption of the skin. This has been readily controlled by discontinuing administration of the drug. Animal studies, using large doses administered over a prolonged period, have revealed a decrease in the maturation of spermatozoa, but this effect is reversible following discontinuance of the drug. Until more is known concerning its long-term effects, blood cell studies should be made during therapy. Frequent or prolonged treatment is not advised until the drug has received more widespread study. It is otherwise contraindicated in the presence of anuria, oliguria, or severe renal damage.

Dosage.—Nitrofurantoin is administered orally in an average total daily dosage of 5 to 8 mg. per kilogram (2.2 to 3.6 mg. per pound) of body weight. One-fourth of this amount is administered four times daily—with each meal and with food at bedtime to prevent or minimize nausea. For refractory infections such as Proteus and Pseudomonas species, total daily dosage may be increased to a maximum of 10 mg. per kilogram (4.5 mg. per pound) of body weight. If nausea is severe, the dosage may be reduced. Medication should be continued for at least three days after sterility of the urine is achieved."

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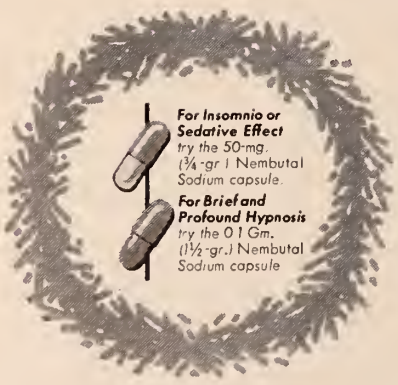
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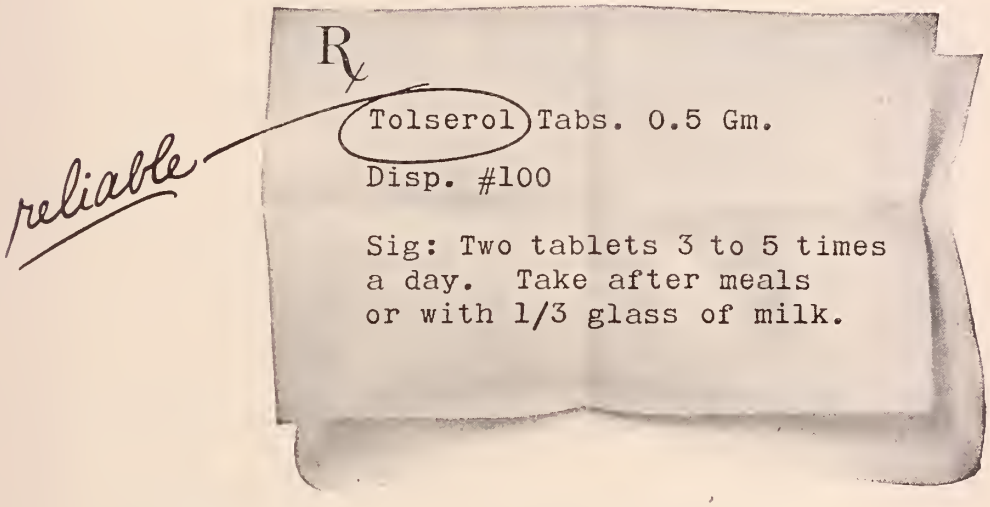
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OF
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CHRISTMAS MESSAGE

The quantity of kindness in the world is unbelievably great. It is ordinarily submerged in the hurly-burly of everyday life, and apparent only to the initiate.

It becomes evident during periods of emotional stress such as the death of a loved one, a wedding, or a birth. It always surprises those who do not realize its presence.

During this season we celebrate the birth of One Who came to this world almost two millennia ago. He carried a message of love and good will toward men. The celebration of this event brings forth all of the human kindness that is latent in us. We pray that it continues, not only through the Christmas Season but through the entire year!

HENRY B. DECKER, M.D., President

AURAL REHABILITATION CENTERS

In the March 1948 issue of this JOURNAL, Dr. Henry A. Brodkin, consultant to the New Jersey Rehabilitation Commission, wrote of the absence of facilities in New Jersey for the hard of hearing and pleaded for the establishment of a modern rehabilitation center. In this article he stated "sooner or later we will have one or more aural rehabilitation centers in New Jersey. There is no reason why we cannot have these units equipped with up-to-date devices for testing hearing loss, re-educating the patient and evaluating hearing aids. The Newark Eye and Ear Infirmary, for instance, if they had the facilities, would be an appropriate site for such a center. Several other excellent locations suggest themselves . . . It is hoped that the otologists of New Jersey will take the leadership in seeing that these

units are established and maintained . . . The problem is a challenge to the doctors in general, to the otologists in particular. Let us hope that the challenge will be met."[1]

Five and a half years later we are happy to announce that there are now established in Newark two aural rehabilitation centers. The Henry C. Barkhorn Memorial Aural Rehabilitation Center at the Newark Eye and Ear Infirmary, which was dedicated on September 15, 1953, is now open and provides every function that a modern rehabilitation center can offer. Through the combined efforts of its board of trustees and medical staff a fine program has been established. At the Hospital of St. Barnabas and For Women and Children, an aural rehabilitation center with speech correction has been established in conjunction with the Cleft Palate and Harelip Rehabilitation Center. All problems pertaining to hearing and speech abnormalities may be diagnosed, evaluated and treated.

The Journal takes pride in having played a role in the establishment of these two institutions to which it wishes every success.

PERIPHERAL VASCULAR SOCIETY

Our October issue carried an announcement on page 477 inviting physicians interested in peripheral vascular surgery to join in the establishment of a New Jersey Society on Vascular Surgery.

It has been called to the editor's attention that many physicians are concerned with the medical, as well as the surgical, aspects of peripheral vascular diseases, particularly those who treat diabetic, arthritic or geriatric patients. Such physicians are likewise invited to signify their interest in the formation of a society for peripheral vascular diseases which would concern itself with both medical and surgical problems. Suggestions and opinions should be addressed to the Executive Offices of The Medical Society of New Jersey, 315 West State Street, Trenton 8, New Jersey.

BLOOD PRESSURE IN THE AGED

The New York Heart Association, the New York Mount Sinai Hospital and the Metropolitan Life Insurance Company are sponsoring a study of blood pressure in persons 65 years of age and over. This project is under the direction of Drs. Arthur M. Master and Harry L. Jaffe, with the assistance of Mr. Herbert H. Marx. The investigation is a cooperative venture in which the aid of seventeen thousand physicians throughout the country is being enlisted.

Until 1950 an arbitrary figure, taken sometimes as 150/100 or 140/90, was considered the upper limit of normal blood pressure for all adults over forty years of age. In 1950, Master and his colleagues published the results of a survey in 74,000 employed persons up to the age of 64; the upper limit of normal was found to be higher than had previously been accepted.

Because of the increasing number of older people in the United States an evaluation of blood pressure in the aged has become necessary. Information is needed to establish the normal range of blood pressure for both sexes over 65, to determine whether blood pressure continues to increase with age, whether it varies with sex in those who are more than 65 years old, and to study the relation of blood pressure to weight, surface area and height. It is also important to determine the significance of hypertension in coronary sclerosis and occlusion, cardiac enlargement, valvular disease, aortic calcification, abnormalities in the electrocardiogram, hypercholesteremia and diabetes.

The present research project will study blood pressure variations and their relation to manifestations of cardiovascular disease in persons

1. Brodkin, H. A.: The Hard of Hearing in New Jersey; A Plea for Better Rehabilitative Resources. J. M. Soc. New Jersey 45:130, March 1948.

65 or over. Since people in this age group are not commonly found in industry and since old age homes are likewise unsuitable, the cooperation of the American Medical Association has been obtained in the present study. Seventeen thousand physicians throughout the United States have been sent simple questionnaire cards which can be completed easily by the insertion of the appropriate figures, and by check marks in yes and no columns. Each physician is asked to complete the questionnaire for six newly examined persons: two in the 65 to 69 year group, two in the 70 to 74 year group, and two above the age of 75. All of the subjects are to be in fairly good health and not bedridden. The investigators particularly desire to study persons who are able to do part or full time work. Patients with rheumatic heart disease, chronic coronary disease, or hypertension may be included in the study group. The most suitable subjects are considered to be patients coming for routine examinations and relatives or friends in the desired age brackets.

Two blood pressure readings on each subject, taken ten minutes apart, are wanted. The diastolic pressure is to be recorded in both the fourth (a definite diminution in the sound) and fifth phases (complete disappearance of the sound). Readings are to be given to the nearest even digit. Other data desired are the height and weight of the subject plus information pertaining to his health.

The information derived from this study will be subjected to careful and critical statistical analysis. It is hoped that new standards of normal blood pressure in aged individuals will be obtained.

Although seventeen thousand physicians selected from the membership of the A.M.A. have been requested initially to complete this card, any other physician interested in participating may do so. If a postcard is sent to "Blood Pressure Study," 11 East 100 Street, New York 29, New York, questionnaires will be forwarded promptly.

Research of this type deserves the active cooperation of all physicians. There is always a need to evaluate critically normal physiologic standards. Dr. Master and his colleagues can be assured that they wll receive the active cooperation of every New Jersey physician who participates in this project.

SEASON'S GREETINGS

This is the season when we all pause in our various pursuits and activities to celebrate Christmas. It is the time when children are awarded their first long vacation from school, and when college students return to their homes for a short break before the mid-term exams. The rest of us take time out to address greeting cards, and to lay in a supply of gifts for our family and friends. Even we physicians perform our tasks with this holiday season in mind; whenever possible we discharge as many hospital patients as we can to their homes, and delay all but emergency operations until after the first of the year. Plans are made for Christmas parties for hospitalized and shut-in patients. A spirit of happiness and joy prevails generally in pleasant expectation of Christmas day and the start of a new year. As we go about our daily lives we extend greetings to one and all; rivalries and controversies melt under the aura of the Christmas season.

And so, it is only fitting that the editorial staff take a moment from its chores to extend to every member of our medical society and to his family and friends, a hearty wish for a very merry Christmas, and a happy, healthy new year.

ORIGINAL ARTICLES

CURRENT CONCEPTS OF RHEUMATIC FEVER PREVENTION*

Henry L. Drezner, M.D.,† Trenton, N. J.

The author summarizes current thinking concerning chemotherapeutic and antibiotic prophylaxis of rheumatic fever.

New developments in the study of the natural history of rheumatic fever and its recurrence have greatly influenced our current approach to the prevention of this disease. The present concept is based on the knowledge that initial and recurrent attacks of rheumatic fever are usually precipitated by a preceding respiratory infection with group A hemolytic streptococci. This does not imply that this organism is the cause of this disease since, basically, the infectious components are not known. With this new concept in mind, one can see that the management of the rheumatic as well as the nonrheumatic patient who has a streptococcal infection becomes extremely important.

Formerly, our efforts were directed to preventing recurrences in patients who had one or more previous bouts of rheumatic fever. Nothing was done to prevent the initial attack. Since it is estimated that about two tenths of one per cent of the general population [1] develop rheumatic fever each year, one can easily see that a large segment of the population is unprotected against this serious health menace. Recurrent attack rates run as high as 50 per cent in untreated streptococcal infections. It is postulated, therefore, that by controlling or eliminating these precursory infections, the incidence of this disease can be reduced. This viewpoint is not universally held by all workers in the field. Dr. Taran, in a personal communication, has expressed himself as follows: "There is no question but that a rheumatic recurrence often follows the streptococcal respiratory infection. There is also no question, however, that there are many patients who develop a rheumatic attack without a preceding streptococcal infection. In my experience, the relationship between streptococcal infections and rheumatic bouts is more or less in the nature of common coincidence rather than that of cause and effect." He also points out the impracticability of treating known rheumatic fever patients for a ten to fifteen year period. Houser and Eckhardt [2] also recognized this difficulty but suggested that its use be confined to closed population groups such as military establishments, institutions, etc., when streptococcal infections are epidemic.

The programs that have been devised for this control are manifold. To review for you those that are presently in vogue, let me list a few:

A very ambitious program carried on by Smith, et al.,[3] in the city of Newton, Massachusetts, consisted of giving persons with suspicious streptococcal infections 200,000 units of oral penicillin, five times a day for five days followed by 300,000 units orally three times a day for five days. In addition to this, all members of a rheumatic fever family in which a member was suspected of having a streptococcal infection were given a ten day course of 100,000 units of oral penicillin three times

* Read before Section on Rheumatism on May 18, 1953, at the 187th annual meeting of The Medical Society of New Jersey.

† Chief of Cardiology, William McKinley Memorial Hospital, Trenton, N. J.

a day. Victims of rheumatic fever within the previous five years were given 100,000 units of oral penicillin three times daily. A survey made during a period of observation of one year or less showed that none had attacks of rheumatic fever, and parents reported an improvement in the general state of health of their children.

Another method of prophylaxis reported by Kohn, Milzer, and MacLean,[4] consisted in the administration of 800,000 units of oral penicillin for seven consecutive days the first week of each month throughout the school year. Most of these children were given 200,000 units before each meal and at bedtime. No significant difference in results was seen in the small group given 250,000 units three times a day thirty minutes before meals. In this report, there were no recurrences of rheumatic fever in any of the forty-eight penicillin-treated children, as compared with 11 and 19 per cent in the two control groups during the rheumatic fever season.

A group of investigators headed by Maliner[5,6] reported that by the use of penicillin troches, each containing 5,000 units, *streptococcus hemolyticus* infections of the upper respiratory tract could be prevented. As a result of their studies, they recommended that penicillin troches replace sulfonamides in all rheumatic fever programs. They found no evidence of rheumatic fever activity in thirty-three rheumatic children, who from September to June received 5,000-unit penicillin troches regularly three times daily.

Probably the first major studies on sulfonamide prophylaxis in rheumatic fever were done by Coburn and Moore, and by Thomas and France, as early as 1939.[7] The former investigators administered sulfanilamide in doses of two grams a day to 80 rheumatic fever patients during the winter and spring seasons; only one of these developed hemolytic streptococcus infection and signs of rheumatic activity. Again in 1940, Coburn and Moore reported on a group of 184 subjects treated prophylactically with sulfanilamide with an incidence of rheumatic attacks of less than 1 per cent. No significant toxic reactions were encountered.

This technic, however, was not without untoward incidence in the hands of Stillwell and Burton,[7] who were forced to curtail the administration of the drug in 25 per cent of the cases under their observation because of toxic effects. Boyer,[7] in his review of the subject, felt that Stillwell and Burton's report was unduly pessimistic since in no other instance did these adverse reactions occur in such high percentages. He concluded, "There can be no doubt that prophylaxis of rheumatic fever with sulfanilamide is an important advance in the control of rheumatic fever. If patients receiving the drug are followed carefully, the incidence of toxic reaction of serious degree will certainly be far less than the mortality or morbidity of active rheumatic fever infections."

In September 1950, Brick, et al.,[8] reported the successful prevention of recurrences by the use of oral penicillin, 50,000 units, thirty minutes before breakfast and three to four hours after supper each day. Over two consecutive winters, rheumatic fever recurrences occurred in six of the control and in only three of the penicillin-treated children.

Continuous sulfonamide prophylaxis for the control of rheumatic fever recurrences has been tried for many years. Bundy, McCue, and Porter[9] reported excellent results in September 1952 in the treatment of 190 children who had previous rheumatic fever infections. Patients weighing up to 50 pounds received Gantrisin® or sulfadiazine, 0.25 gram, twice daily; those weighing 50 to 100 pounds received 0.25 gram in the evening; children heavier than 100 pounds were given 0.5 gram twice a day. The recurrence rate was 2.9 per cent during an average of 24 months in those on sulfadiazine and 1.5 per cent during an average of 11 months among those on Gantrisin.® In a somewhat parallel group from the same clinic in 1948, the recurrences ran as high as 61 per cent. They concluded that sulfadiazine and Gantrisin® are as effective as penicillin for prophylaxis against rheumatic fever with the practical advantage of being less expensive.

Long[10] states that most children can be protected against the recurrence of rheumatic fever, if, during the period of exposure to

hemolytic streptococcal infections, they are given sulfadiazine, one gram a day, or oral penicillin, 100,000 units, four times daily for the first week of each month.

A comprehensive study of this subject was undertaken by Houser and Eckhardt at the Warren Air Force Base[2] and their conclusions are most significant. In their opinion, the decline in the incidence of rheumatic fever can be successfully accomplished by the chemoprophylaxis of the preceding streptococcal infection and the treatment of such infection with antibiotics. As a matter of fact, the prophylactic measures against streptococcal infections are far more effective in preventing recurrent episodes of rheumatic fever than the treatment of these infections when they occur in the rheumatic fever patient. Further, patients with active rheumatic fever and those who have recently recovered from an attack, should be placed on sulfadiazine prophylaxis rather than penicillin since no adequate regime for penicillin prophylaxis has been established. Sulfadiazine, in their opinion, should be given daily in doses of 0.5 to 1 gram for a minimal period of three years. In other instances, it may have to be continued for longer periods especially if the subject is unusually exposed to these organisms. Should an infection make its appearance, immediate and adequate treatment with penicillin for a period of at least ten days is necessary. The usual dose is 600,000 units of procaine penicillin G daily during the period of infection.

In that group of patients whose last episode occurred more than two years previously or whose history is negative for rheumatic fever yet show evidence of rheumatic heart disease, the approach is not as clear. In school-age children where the opportunity for acquiring streptococcal infection is more probable during the school year, or in the late winter and early spring, prophylactic treatment should be given. In adults, on the other hand, protection is given when streptococcal disease is epidemic. Where there is no history of rheumatic fever, if a streptococcal sore throat develops, penicillin or Aureomycin® can be used, with the former preferably administered by injection.

The whole matter of prophylaxis in rheumatic fever was ably crystallized in the report of the Committee on the Prevention of Rheumatic Fever, appointed by the Council on Rheumatic Fever of the American Heart Association. This group concurred in the concept that adequate and early treatment of all streptococcal infections whenever they occur is necessary in order to reduce the incidence of this disease. Their plan suggests that penicillin is the drug of choice and it can be administered either orally or intramuscularly in the following manner: for children, 300,000 units of procaine penicillin with aluminum monostearate in oil, every third day for three doses; in adults, one intramuscular injection of 600,000 units of procaine penicillin with aluminum monostearate in oil, every third day for three doses. If the oral route is preferred, penicillin in doses of 200,000 to 300,000 units, one half to one hour before meals and at bedtime for the first five days is given, and in the second five days the dose is reduced to 200,000 or 250,000 units, one half to one hour before meals in three divided doses.

Aureomycin® is used only when the person is sensitive to penicillin. Here, the dose is 10 milligram per pound of body weight in four divided doses daily for two days. The dose is then cut in half for the remaining eight days. Penicillin troches are not recommended.

The Committee recommends as protection against streptococcal infections in individuals under eighteen years of age who have had rheumatic fever (or any of its equivalents) within a five year period, sulfadiazine or penicillin. The former is given in doses of 0.5 gram to 1 gram each morning throughout the year, whereas penicillin is given in doses of 200,000 to 250,000 units twice daily, preferably one half to one hour before meals and at bedtime. This is continued to the age of eighteen; in patients above this age, for a minimum of five years following their last attack.

The weight of the evidence for this new approach is undeniable, yet I cannot conclude this talk without this significant statement made by Dr. Taran, "I am worried about the philosophical implications of raising a generation of

human beings on a diet of antibiotics." I believe that the whole question of rheumatic fever prevention deserves our whole-hearted enthusiasm. However, in my opinion, final judgment must be held in abeyance until more experience has been accumulated.

216 West State Street

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NEW JERSEY'S NEW PREMARITAL LAW

New Jersey's Premarital Law which was amended effective July 1, 1953, extends interstate reciprocity of premarital examinations. The major changes in the new law (Chapter 416, P.L. 1953) are:

1. The acceptance of certification by a physician (licensed to practice medicine and surgery in the United States and its territories, or on active duty with the armed forces of the United States or with the Public Health Service) that an approved serologic test for syphilis has been done and that, in the opinion of the physician, the applicant is not infected with syphilis or is not in a stage of that disease which is likely to become communicable. The physician may sign the certificate of a person who has a serologic test reactive (positive) for syphilis, but who is adequately treated or is not in an infectious stage.

2. The acceptance of certification by any laboratory approved for the performance of serologic tests for syphilis by any state or territorial health department, the Department of Health of the District of Columbia, the armed forces of the United States, or the Public Health Service, that an approved serologic test for syphilis has been performed on the blood sample of the applicant.

3. The acceptance of premarital certificate forms from states and territories other than New Jersey if the form is approved for use in this state by the Department of Health and contains a statement certifying that the laboratory has the approval described in 2 above.

4. The acceptance, in lieu of a premarital certificate form, of a statement from the physician that a female applicant is near the termination of her pregnancy, or that death of either or both of the applicants is imminent and that he has taken blood samples for testing from such applicants, excepting those whose death is imminent, and forwarded them to the State Department of Health Laboratory.

PROPHYLACTIC USE OF AN ANTIHISTAMINE IN BLOOD TRANSFUSIONS*

WILLIAM G. BERNHARD, M.D., HAROLD GRUBIN, M.D. and
MARY VIRGINIA BRYAN, R.N., Newark, N. J.

Subcutaneously administered Histadyl® was found to reduce transfusion reactions to a significant degree in 1004 separate transfusions.

The advantage of some simple prophylactic method to minimize or prevent certain reactions during and following blood transfusions is obvious. Since many transfusion reactions are allergic in nature, it was thought that an antihistamine might prevent or alleviate such reactions.

The purpose of this study was to determine the prophylactic value of the subcutaneous administration of an antihistamine (Histadyl)® in blood transfusion reactions.

The transfusions reported here were given between May 18, 1952 and December 30, 1952. These ranged from 500 to 7000 milliliters of blood per patient. Each transfusion represented one continuous infusion of blood. A total of 1004 transfusions was given with the administration of 1237 pints of blood.

MATERIAL AND EQUIPMENT

The blood used in this series was collected in 120 or 130 milliliters ACD† solution in Cutter bottles. Approximately one-half of the blood used came from the blood bank of St. Barnabas Hospital, one-fourth from the Essex County Blood Bank (American Red Cross) and the remainder from Postgraduate and Knickerbocker Hospitals Blood Bank, New York City. Rules for donors and regulations for collecting blood were those recommended by the American Red Cross. All blood was stored at 4 degrees Centigrade and none was administered after twenty-one days.

The transfusions were started by administering isotonic saline that was attached by a Y-tube to the bottle of blood. When satisfactory intravenous flow was established, the saline was discontinued and the blood started. The transfusion of 500 cubic centimeters was completed in approximately one hour unless there was a specific clinical indication either to increase or decrease the rate of flow.

All equipment used in donor and recipient sets was pyrogen-free disposable Cutter equipment. A Cutter filter was always used. The blood was allowed to reach room temperature in most cases before the transfusion was started.

METHODS

The antihistaminic drug used was Histadyl.® It was supplied for use by Eli Lilly & Co., Indianapolis, Indiana, in 10 cc. rubber-stoppered ampoules (No. 488) containing 20 milligrams per cubic centimeter in distilled water. One half cubic centimeter was injected subcutaneously fifteen to twenty minutes before the transfusion was started. This 0.5 cc. was repeated only if a reaction occurred. If no reactions were noted, no more Histadyl® was given regardless of the quantity of blood transfused.

All transfusions reported in this series were given by three nurses on the intravenous and transfusion service. The nurse starting the transfusion was responsible for giving the antihistaminic drug. She stayed with the patient until the first 100 cc. were given and was notified immediately if a reaction occurred after that time.

All reactions were reported at once to the laboratory. Frequent daily rounds were made by the transfusion service to check each patient for any reaction. If the patient had a chill, his temperature was taken at that time or shortly thereafter. The amount of Histadyl® given and whether or not a reaction occurred

* From the Department of Pathology and Transfusion Service, Hospital of St. Barnabas and for Women and Children.

† Each 100 cc. of ACD solution contains 1.32 grams of sodium citrate, U.S.P., 0.48 gram of citric acid, U.S.P., and 1.47 grams of dextrose, U.S.P.

was charted in every case. These charted reactions were critically reviewed. A record which included the patient's name, hospital number, number of transfusions received, quantity of blood administered, amount of Histadyl® given and a detailed description of each reaction was kept daily by the head nurse of the intravenous and blood transfusion service.

RESULTS

We have divided our reactions into allergic, pyrogenic, hemolytic, and doubtful. Ferris, Alpert and Coakley[1] define the reactions as follows:

Allergic—Characterized by urticaria, angioneurotic edema, dyspnea, asthmatic disturbances or anaphylactic shock.

Pyrogenic—Chill with or without fever, nausea, vomiting and prostration.

Hemolytic—Substernal pain and sense of constriction, pain in the lumbar region and in the groins radiating to the legs, violent chills, fever, nausea, vomiting, prostration, fall in systolic blood pressure, rapid shallow breathing and a rapid, thready pulse. This is often followed by oliguria, anuria, renal insufficiency, hemoglobinuria, hematuria and jaundice.

Allergic reactions are further subdivided into:

Severe—resembling anaphylactic shock

Moderately severe—evidenced by respiratory difficulties and loss of sphincter control

Mild—characterized by urticaria

There were no hemolytic reactions in our series, twelve allergic reactions and sixteen pyrogenic.

We have included three reactions listed as doubtful. One was a patient with hypertensive cardio-renal disease who manifested extreme dyspnea, pallor, rapid pulse, pulmonary rales, and no rise in temperature one-half hour after receiving 1000 cc. of blood. This was the result of cardiac overloading rather than an allergic reaction. The other patient had chronic leukemia; he daily experienced a chill and a rise in temperature every morning whether blood was given or not. A transfusion given in the morning was always associated with a chill and febrile reaction whereas this did not occur with a transfusion given in the afternoon. This patient experienced two such reactions.

DISCUSSION

No control series was used as it was felt that no patient should be deprived of the benefit expected from Histadyl.® Some patients given transfusions at night, during operations, or at odd hours, did not receive Histadyl®, but this group was not large enough for comparison. The only fair control would have been to give every other patient Histadyl® and take the cases as they came. However, this was not done for the reason mentioned.

We preferred the subcutaneous route of administering Histadyl® to the method of adding it directly to the blood because of the ease and simplicity of administration, the danger of contamination of the blood by inexperienced personnel and because of the possibility of a toxic overdose, which has been found in mice to produce convulsions and death.

TABLE 1.—AMOUNT OF BLOOD GIVEN IN 1004 TRANSFUSIONS

No. of Transfusions	Amount of Transfusion	Total No. Units*
823	500 cc.	823
149	1000 cc.	298
26	1500 cc.	78
3	2000 cc.	12
1	2500 cc.	5
1	3500 cc.	7
1	7000 cc.	14
1004		1237

*Each unit represents 500 cc.

TABLE 2

REACTIONS IN PATIENTS RECEIVING HISTADYL® — 1004 TRANSFUSIONS

Type of Reaction		Number of Reactions	Incidence of Reactions
Allergic		11	1.09%
Severe	1		
Moderately severe	0		
Mild	10		
Pyrogenic		14	1.39%
Severe with elevation of temperature	8		
Severe with no elevation of temperature	3		
Slight with no elevation of temperature	3		
Other—Doubtful		2	0.199%
Cardiac overloading	1		
Possible pyrogenic	1		
TOTAL		27	2.68%

Although our reaction rate of 2.68% (Table 2) was not as low as we would have liked, it was considerably less than that occurring in previous years at this hospital, when it has been between 4 and 6%. The latter compared favorably with the figures of Strumia and McGraw [2] who reported approximately 2% allergic reactions and not over 3% pyrogenic reactions. Lundy *et al.*[3] reported an untoward reaction rate in 1950 and 1951 of 5.25% at the Mayo Clinic. Of these, in 1951, pyrogenic reactions were 2.36%, allergic 2.52%, undetermined 0.30%, circulatory 0.05% and hemolytic 0.01%. Although not strictly comparable, our figures of 1.39% pyrogenic and 1.09% allergic are significant. It is difficult at times to differentiate an allergic from a pyrogenic reaction. In borderline cases one might list as pyrogenic a reaction which was in reality allergic. Perhaps this explains why the incidence of pyrogenic reactions was also lowered, but to a lesser extent.

Tests of significance of our figures against figures representative of the total experience throughout the country without Histadyl® were performed by Mr. P. J. Burke, of the Department of Mathematical Statistics, Columbia University. The following questions were investigated:

(1). Is the over-all rate of reactions lower with Histadyl® than without Histadyl®?

(2). Is the rate of allergic reactions lower with Histadyl® than without Histadyl®?

(3). Is the rate of pyrogenic reactions lower with Histadyl® than without Histadyl®?

This statistical analysis led to the conclusion that for each of these three questions the data demonstrate a real difference, in the expected direction, in the rates of reactions.

This series contained three doubtful reactions but they were included in the over-all rate as one is never completely sure that the blood is not a factor. Certain conditions such as multiple transfusions, blood dyscrasias, severe anemias, aplastic anemias, malignant conditions and infections which are known to give a high reaction rate were also included.

Table 3 shows that the larger the volume of blood given in a single transfusion, the higher the incidence of reactions. It was also noted that certain patients would have a reaction with one transfusion and not have any reaction with prior or subsequent transfusions. All the patients to whom a second 0.5 cc. of the antihistamine was given because of a reaction experienced prompt relief which in many cases was complete. Hence, we feel that 0.5 cc. (10 mg.) of Histadyl® is not sufficient to prevent all types of reaction.

TABLE 3

INCIDENCE OF REACTIONS IN 1004 TRANSFUSIONS

Number of Transfusions	Amount of Transfusion (in cc.)	Number of Reactions	Incidence of Reactions
823	500	18	2.18%
181	1000 to 7000	9	4.96%

The only side reaction noted was slight drowsiness in some patients. If drowsiness should occur, it is desirable for the patient who is receiving a transfusion. Therefore, we are of the opinion that the dosage should be increased to at least 1.0 cc. (20 mg.) given 15 to 20 minutes before the transfusion is started. If more than 500 cc. is to be given, another 0.5 cc. should be repeated with each additional bottle of blood.

CONCLUSIONS AND SUMMARY

The parenteral use of an antihistamine (Histadyl®) as a prophylactic drug against reactions was studied in 1004 transfusions with the administration of 1237 pints of blood.

1. The over-all incidence of reaction was 2.68%.
2. Pyrogenic reactions were slightly more frequent than allergic reactions.
3. No hemolytic reactions were present in this series.

An antihistamine (Histadyl®) administered subcutaneously 15 to 20 minutes before a blood transfusion lowered the over-all incidence of reactions. The incidence of these post-trans-

fusion reactions was about one-half the incidence in other series where an antihistamine was not used.

It is our impression that a larger amount of the drug will prove to be even more efficacious.

685 High Street

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SUBPERITONEAL HEMORRHAGE

A cryptic source of blood loss may be subperitoneal hemorrhage, an uncommon and puzzling condition in which loss of blood is often not suspected. Cushman[1] has recently reviewed his experience with this syndrome, in seventy-one patients. Hemorrhage, which occurs from the superior mesenteric artery in 75 per cent of cases, is often brought on by trauma or apparently insignificant strain. In this series, two-thirds were males, 42 per cent had obvious vascular disease, and there was a history of trauma or strain in 18 per cent.

Onset is heralded by dull, constant abdominal pain, sudden in appearance, and accompanied by nausea. Vomiting makes the pain worse, as does continued bleeding, due to the gradually enlarging hematoma confined between the leaves of the mesentery or underneath visceral peritoneum. When bleeding stops the pain subsides, to return if hemorrhage recurs. Recurrence may be caused by eating, catharsis, retching or effort. This intermittent abdominal pain, with intervals of hours or days, is almost pathognomonic of this syndrome.

With continued hemorrhage the overlying peritoneum finally ruptures. This is indicated by a return of sudden excruciating pain and shock which is often deep and frequently fatal. If the patient survives, abdominal examination will show diffuse soreness and exquisite rebound tenderness with no muscle guarding. This gradually develops into rigidity and distention, indicating hemoperitoneum with peritonitis and adynamic ileus.

Cushman divides his cases into four groups: 1) those operated on in the hematoma stage, 2) those with surgery in the hemoperitoneum stage, 3) those who died without surgical intervention, and 4) those who recovered spontaneously.

Additional evidences of this syndrome are a palpable mass in the abdomen, and a falling erythrocyte count indicating progressive blood loss.

Awareness of the condition will lead to its early diagnosis and prompt surgical intervention. With the increasing incidence of vascular disease in older patients this syndrome deserves prominence among the acute abdominal emergencies requiring accurate diagnosis.

1. Cushman, G. F.: Subperitoneal Hemorrhage. California Med., January, 1953.

PUERPERAL RECTAL SURGERY*

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Cogent arguments are advanced, based on a review of the literature and a statistical study of a general hospital's records, for more definitive surgical treatment of anorectal complications of pregnancy.

The puerperium is an ideal period for the management of hemorrhoids and allied rectal disorders.

The literature pays scant attention to the treatment of hemorrhoids associated with pregnancy. Standard texts on proctology, obstetrics and gynecology contain only the most meager references. The information in these texts varies from as little as no mention at all to a discussion of generalized palliative measures.[1,2,3,4] One is left with the feeling that no deep insight into this phase of the disease exists.

Conservatism seems to be the order of the day in the practice of obstetrics, aggressive treatment being frequently condemned as "meddlesome midwifery." It may be, also, that the accoucheur has a rather limited knowledge of anorectal disease, and, like many other medical practitioners, tends to ignore the nether anatomy, usually with the tacit approval of the patient. However, the postpartum hospital stay often becomes a nightmare to the patient because of severe rectal discomfort. Since the customary therapeutic armamentarium consisting of anesthetic ointments, suppositories, hot or cold applications, narcotics, etc. is frequently ineffectual, other available measures should be evaluated.

It is common knowledge that, in most cases, hemorrhoids will subside after parturition, due to the normal involutionary changes that occur in the pelvirectum and genital organs. However, by no reasonable degree of optimism can the physician expect a pre-existing hemorrhoid problem to be improved by the pregnancy. In fact, the condition will worsen, and deteriorate further with each subsequent pregnancy.

If then, such a course is to be expected, the hospital postpartum period of 7 to 8 days can and should be used to institute important corrective measures without loss of additional time, expense of another admission, or increased risk. In fact, physiologically, this may be the ideal time to perform such correction.

Bubis[5,6] has for many years pioneered in the field of immediate gynecologic puerperal surgery, having coined the term "puerperal gynecology," and has more recently[7] presented collected statistics proving the lack of materially increased morbidity or mortality due to these procedures. Interestingly enough, he includes 335 hemorrhoidectomies in 10,254 deliveries during a ten year period among his gynecologic procedures. One cannot be sure from the report that all these hemorrhoidectomies were radical repairs or whether many were not simple excision of external thromboses or partial excisions of prolapsed areas. In most cases, they appear to be part of a multiple procedure including a vaginal plastic repair.

Hudgins[8] likewise uses the postpartum period to attack perineal relaxation. He counts the advantages to the patient not only in health and well-being, but also in "expense and expediency," accomplished without increased hazard to the patient and with a minimum of technical difficulties.

Pope[9] recently discussed in great detail the subject of anorectal complications in pregnancy. He pointed out that vascular, muscular and fascial changes occur consisting of engorgement, hypertrophy and distention, with increasing elasticity and congestion right up to

* Presented at the annual combined meeting of the New York, New England, Philadelphia and New Jersey Proctologic Societies in Newark, N. J. on December 5, 1953.

parturition. These changes occur in the anorectum as well as the genitopelvic organs.

Douglass [10] reports, in discussing elective postpartum perineorrhaphy, that the arguments against this are theoretical, second-hand and fallacious. They consist primarily of

a. The area is very vascular and surgery will be accompanied by extensive bleeding. (In practice, it has been found that the bleeding is readily controllable.)

b. The lochial discharge will cause infection and prevent healing. (This likewise has not been found true, since the tissues have an immunity to the patient's own organisms. Otherwise, all episiotomies would become infected and break down.)

He lists the favorable factors during this period as

a. A better blood supply leading to better and more rapid healing.

b. The operation is easier due to better lines of cleavage.

c. The postoperative period is much less painful.

d. The postpartum hospital stay is not increased.

e. The patient does not have to return for another period of hospitalization.

f. The patient's health and physical condition are greatly improved over what they were before childbirth.

Douglass takes advantage of the increased vascularity and improved healing to correct genital soft tissue damage, with reported excellent results. He makes mention of the possible advantages of hemorrhoidectomy at this time, but does not elaborate on this subject. It is fair to assume that his conclusions concerning postpartum gynecologic surgery would apply equally well to rectal surgery. Pope, however, reverts to the usual conservative recommendations, hoping for postpartum involution to help. He admits, though, that he has to warn the patient that future pregnancies will aggravate the rectal condition, and that he encourages interim surgery. Nesselrod [11] actually condemns postpartum surgery of acute hemorrhoids because of his opinion that there may be possible complications of deep pelvic phlebitis, pylophlebitis and liver abscess. Yet he concedes disagreement with other authorities of eminence, and admits that there is much delay in healing and economic loss due to conservatism. Theoretically, these same complications could also occur from thrombosed hemorrhoids with attendant secondary infection which have not been adequately treated. Furthermore, the judicious use of antibiotics and early ambulation should allay even these theoretic fears.

It is interesting to call to the reader's attention that, in general, conservatism in management is the recommended procedure of the proctologists, the more radical approach being suggested by the obstetrician-gynecologists.

Recently, the author was called to see a young woman after her second normal delivery, on the third postpartum day. She had severe perianal thrombosis and edema, some hemorrhoidal prolapse and excruciating sleep-sacrificing pain. None of the standard methods of treatment had been of avail, and the patient even hinted at self-destruction.

Needless to say, she was operated on without delay; the typical radical ligature and dissection hemorrhoidectomy was performed in the usual three locations, under intravenous Pentothal® anesthesia plus perianal injection of 20 cc. of an oil soluble anesthetic. No major difficulty was encountered during the course of surgery. The tissues were a little more friable than usual, and had to be handled with more care. There was a lot of distortion due to the thrombosis and edema, but the surgery was performed with consideration for the expected involution of the tissues. Care was exercised, therefore, not to excise too much tissue, but at the same time all clots were carefully removed and adequate avenues of drainage provided, with absolutely no suturing of the skin or anoderm. There was no more than the usual amount of bleeding.

The patient's convalescence was remarkably uneventful. Pain was immediately relieved, she was ambulatory almost from the time she recovered from the anesthetic, and was discharged on the seventh postpartum day, which corresponded to the fourth postoperative day. A laxative was administered on the night of the second postoperative day. The following morning she had a successful evacuation. Sitz baths were instituted immediately after bowel movement. She suffered no ill effects therefrom, in fact enjoyed the bath for both the rectal and vulvo-vaginal comfort.

There is some hesitancy over the safety of sitz baths postpartum, some obstetricians fearing possible complications, others[12] recommending them without qualms. Several doses of Combiotic® were administered to the patient during the three days following operation, to control any possible infectious complication. There was no rise of temperature above normal. It may be wise to use the antibiotics unless enough statistics can be gathered to prove that they are not necessary.

Amazingly enough, this woman was completely healed, with all wounds epithelialized in three weeks, or about half the usual time. There was almost no pain during convalescence and very little postoperative treatment was necessary. She suffered no disability at home and reported that she felt much better rectally than she had in the interval between pregnancies. Her former bleeding and prolapse at stool were now gone. Examination revealed no tendency to stenosis. The anal aperture was completely elastic, pliable and free of tenderness and spasm. The postoperative course corroborated the tenet that the physiology of the puerperium influences surgery favorably.

The author reviewed the files of the Newark Beth Israel Hospital for the past six years (1947-1952). During this time there were 17,634 deliveries. Only ten radical hemorrhoidectomies were performed in the puerperal period, roughly, one in 1800 cases delivered. Four were performed on the third, three on the fourth, two on the fifth and one on the seventh postpartum day. In every case, the hospital stay was not prolonged, the patients being discharged on the third or fourth postoperative day, which also averaged the eighth postpartum day.

There were no complications, not even temperature elevations. In most cases, management was no different than in the usual hemorrhoidectomy, except the apparent timidity towards using the customary sitz bath. There is sufficient reason to believe that sitz baths should not be injurious, in fact, should be helpful even from the obstetrical viewpoint. Hudgins[13] recommends using two inches of hot water, in a regular bath tub or his special sitz bath chair, to which has been added one glassful each of coarse salt and vinegar. "This makes the solution not only antiseptic, by the formation of a mild acid solution, but also hypertonic; thus tending to draw fluid from the perineal wound area and reducing any tendency to edema."

We must assume that rectal complications occurred in a much greater number of cases than the ten mentioned. In only fifteen other cases, however, did the attending physician note any rectal complications in the record. These were all treated conservatively, some with poor or equivocal results. In addition, in three cases an external or internal hemorrhoid was removed at delivery. One case had a prolapsing rectal polyp removed by ligature at the time of delivery. One minor rectal laceration was reported, repaired at delivery. It is reasonable to assume that many more women had varying degrees of rectal complications, but this information was not given enough attention to place into the record under the discharge diagnosis.

It is quite apparent, from these statistics, that the problem of hemorrhoids in the puerperium has not been satisfactorily handled, and that the radical curative approach has been resorted to much too infrequently. Those cases that were so treated gained very much therefrom and suffered no ill consequences. The work of Bubis makes very impressive reading, and the author recommends it to allay any theoretical resistance and skepticism one may have as to the adequacy of investigative work in this direction. As long as conservatism prevails it is difficult to build up a large numerical basis for conclusions. In fact, it is regrettable that the records show such inattentiveness to rectal complications, and that more vigorous treatment has not been instituted in many cases.

The author contends that, provided no surgical or obstetrical contraindications are present, there is special indication for radical hemorrhoidectomy in the early postpartum period in two types of cases:

a. The patient who has had symptoms predating the pregnancy; it is apparent that sooner or later surgery will be necessary. Hemorrhoidectomy is all the more indicated if the symp-

toms have been materially aggravated by the pregnancy. During the antepartum period, the advisability of puerperal surgery should be discussed with the patient.

b. The patient who has developed severe hemorrhoid symptoms for the first time, and in whom palliative measures obviously will be or have been of little avail. Surgical relief should not be denied this patient on the chance and hope that involutionary changes will correct the difficulty. Besides being subjected to unnecessary pain and suffering the patient cannot be assured that she will not be left with residual hemorrhoids.

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POST-ANTIBIOTIC INFECTION

Dearing and Heilman,* at the Mayo Clinic, have gathered data to show that following the administration of Terramycin® or Aureomycin® resistant strains of micrococci (staphylococci) may be present in more or less pure culture in the intestinal tract. This infection may produce mild to extremely severe gastrointestinal and systemic symptoms.

Forty-four patients receiving Terramycin® or Aureomycin® were studied. Cultures were made from the intestinal lumen at the time of operation in those patients who received Terramycin® before surgery. It was found that a majority of patients receiving Aureomycin® or Terramycin® developed resistant strains of micrococci in their gastrointestinal contents or stools. All of these patients, however, did not develop symptoms. Among those who did develop symptoms the manifestations of infection with this organism ranged from mild gastrointestinal distress to severe diarrhea and even fatality. In patients coming to autopsy the pathology of *Micrococcus Pyogenes* infection resembled pseudomembranous enterocolitis. However, evidence is presented to suggest that these two entities are not identical.

When patients who have received Terramycin® or Aureomycin® were found to have enterococcus in their intestinal flora, they were treated with erythromycin. The infection promptly disappeared and they made an uneventful recovery.

*Dearing, W. H. and Heilman, F. R.: Micrococcic (Staphylococcic) Enteritis as a Complication of Antibiotic Therapy: Its Response to Erythromycin. Proc. Staff Meet., Mayo Clin. 28:121, March 11, 1953.

ELECTROCARDIOGRAPHY: ITS VALUE AND LIMITATIONS

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The proper role of electrocardiography in studying cardiac disease is outlined. Emphasis is placed on its value in the arrhythmias and its limitations in evaluating patients with myocardial infarction, suspected or proved.

The frequent demands by practitioners for a precise etiologic diagnosis, a prognosis and even treatment, based solely upon the interpretation of a single electrocardiogram, focus attention on the need to distinguish between a clinical cardiac consultation and one limited to the electrocardiogram.

So well has the electrocardiographic machine been "sold" to both older and younger physicians, that reference to its findings alone seems often to be accepted as the final word on the cardiac status of an individual. This is in sharp contrast to its status in 1933, when inclusion of this apparatus in the armamentarium of a local hospital produced the general opinion that it was just another gadget for erudite amusement. At that time, the instrument was practically unknown to the public. Today, patients suggest its use when any cardiac involvement is mentioned. The expectation of thus gaining considerable information about their cardiac status is frequently shared by their referring physicians.

Any diagnostic method has limitations which must be clearly understood to avoid an erroneous interpretation of findings. The electrocardiogram is merely an objective presentation of one phase of cardiac physiology, expressed in electrical vectors.

Cardiac muscle has essentially the properties of: 1) rhythmicity, 2) irritability, 3) conductivity, 4) tone, and 5) contractility.

The electrocardiograph gives information relative to the first three of these attributes. But tone and contractility, so important in muscle function, are not evaluated adequately by this instrument. The electrocardiograph does not give data concerning the mechanical efficacy of the heart muscle, a very important feature in clinical evaluation.

As repeatedly emphasized,[1] the electrocardiograph has its greatest utility in disorders of the heart associated clinically with disturbances of rhythm, irritability, and conductivity; certain other disorders produce characteristic patterns, originally determined on an empiric basis. The disorders of rhythm are clarified expeditiously and accurately in most instances.

The electrically recorded impulse arises in the sino-auricular node, and is transmitted in all directions throughout the atrial musculature.

It reaches the atrioventricular node, essentially a relay center, at the lower part of the interauricular septum, but still in the right atrium. This node is normally the only pathway for the impulse between the atrium and ventricle. The atrioventricular bundle, as a neuromuscular cable, conveys the impulse through the posterior portion of the membranous part of the interventricular septum until it reaches the upper posterior muscular part of this septum. It then divides into right and left branches, each coursing on its respective side of the septum. By means of frequent subdivision of each of the branches, the terminal arborizations permit the impulse to reach all parts of the muscle almost simultaneously.

The electrocardiogram[2] can follow very accurately the course of the impulse and its distribution in the heart and so indicates:

1) The rate of impulse formation.

2) The site of impulse formation (e.g., sinus, atrioventricular node, or ventricle).

3) Abnormal impulse formation (e.g., flutter or fibrillation, atrial or ventricular extrasystoles.)
4) Speed of conductivity (P-R & QRS intervals).
5) Interference in conductivity.

This data can be obtained with a precision and ease rarely available in the biologic sciences. However, even in this realm problems exist. Supraventricular tachycardias still require elucidation, since the electrocardiogram is too often confusing on this subject.

Certain patterns are recognized which have given the electrocardiogram considerable value as a diagnostic tool. These are the patterns of: 1) ventricular strain (hypertrophy), 2) cor pulmonale, 3) bundle branch block, 4) pericarditis, 5) coronary insufficiency and, of course, 6) myocardial infarction. It should be emphasized that the electrocardiogram demonstrates the pattern of an infarcted area only after infarction has occurred. The tracing may be completely normal on the previous day. Further, a tracing may be normal in a gradually developing coronary impairment, but a series of tracings will often show minor changes. When the tracing is equivocal, the safest course is to treat the patient as if an infarct existed. Most acute cases will develop typical patterns in twenty-four to forty-eight hours. These findings are usually evident in one week and definitely in two weeks. Sufficient leads, both unipolar and chest, must be used to avoid missing a small infarcted area. At least 12 leads are necessary and additional ones should be taken from higher in the interspaces of the chest, if indicated. Esophageal leads are the delight of the investigator, but not clinically practical, nor are they entirely without danger in a seriously ill patient.

For the specific diagnosis of acute ventricular infarction, both QRS and ST-T changes are essential. Such changes reflect alterations in the patterns of both depolarization and repolarization.

Death of cardiac muscle is indicated by the development of a Q wave. Necrotic muscle is surrounded by a zone of partially damaged muscle, from which emanates the "current of injury" manifested by elevated ST segment changes. Though any form of injury such as inflammation (pericarditis), trauma or even drugs may produce these alterations, infarction is probably the most common cause.

Surrounding the partially damaged muscle is a more extensive layer of anoxic, ischemic muscle. This has the property of depolarizing in normal fashion, but does not repolarize in the same way as normal muscle, and thus gives rise to the so-called "coronary T wave" with its inverted symmetrical shoulders. While T wave changes may initially be the only demonstrable electrocardiographic evidence of infarction, they are likewise the most unreliable, the most nonspecific, and most likely to lead to a mistaken diagnosis. Serial electrocardiograms are imperative, together with careful clinical appraisal of the patient. The causes of T wave changes are many, and may be of either organic or physiologic nature, or of extracardiac or intracardiac origin. These facts often escape the notice of the practitioner and require emphasis. The electrocardiographer cannot give a specific diagnosis based upon T wave changes alone. T waves may be altered by endocrine factors (e.g., thyroid), by electrolyte changes (potassium, calcium), fever, avitaminoses (e.g., beri-beri), nervous factors (vagal and sympathetic), and by drugs (notably digitalis, epinephrine, amyl nitrite, atropine, quinidine). Eating may alter the T wave. Drinking a glass of cold water may cause inversion of the T wave, as has been long recognized. Hypoglycemia, neurocirculatory asthenia and emotions may remarkably affect this element of the electrocardiogram. And further, to this list may be added postural changes, renal and adrenal diseases, and the acute infections (e.g., diphtheria and rheumatic fever). The best clinical attitude towards unusual T waves is to regard them as an indication for further investigation, both clinically and electrocardiographically. An inverted T wave must lead the careful physician to ask and find the answer to the question: "What is its real significance"?

The electrocardiogram can be disappointing and present difficulty in the differential diagnosis of cardiac and abdominal disease. For example, a gangrenous ileum with peritonitis

has produced a tracing erroneously interpreted as myocardial infarction because of definite changes, which proved however to be nonspecific. The diseased gallbladder notoriously produces annoyingly suspicious tracings.

Atypical tracings may, surprisingly enough, be obtained from multiple infarcts—especially in terminal cases. The pattern may be very confusing, especially with the addition of abnormal rhythms.

Another misconception which needs clarification relates to the follow-up of the progress of the infarct. Electrical changes do not necessarily parallel the clinical state. Clinical features should prevail in judging the recovery of the patient. Prognosis based upon the electrocardiogram only is hazardous, though some idea of the extent of the infarct may be obtained, as well as information concerning the development of a second infarct. Knowledge of the onset and diagnosis of abnormal rhythms is facilitated so that appropriate treatment may be given. Some patterns which quickly return to normal may indicate a milder lesion; but others may never become normal, even though the patient is clinically well.

The emphasis upon rigid criteria for diagnosis of myocardial infarction should not detract from underestimating the value of the electrocardiogram. For every confusing case, the great majority is promptly and unequivocally diagnosed.

To assist the electrocardiographer, the following data are essential: age, body build, weight and height, amount and dates of medication with digitalis and quinidine, reason for electrocardiogram, present clinical diagnosis. The blood pressure should be taken at the same time that the tracing is recorded. Digitalis requires two to three weeks for its effects to be eliminated from the electrocardiogram.

The science of electrocardiography has been expanding. In the late twenties, it was thought the peak had been reached with the three lead bipolar tracing, only to have the horizon widened with the re-introduction of chest leads. In the very early days of the pioneers, chest leads were originally used, only to be discarded in favor of the bipolar limb leads. These chest leads have so well aided interpretation of infarction of the anterior surface of the heart, that it is rare to miss a lesion there today, provided an adequate number of leads is taken, including those in the higher interspaces. The left lateral cardiac surface can also be explored from the left axilla.

The posterior inferior surface of the heart, a frequent site for infarcts, is a difficult region from which to obtain unequivocal diagnostic tracings. Bipolar leads 3 and also 2 may show changes but there may be confusion because a Q_3T_3 pattern occurs normally as the result of position. The unipolar leads have been of considerable assistance, but do not produce tracings comparable in localization to the anterior chest leads. However, the augmented left leg lead has been of considerable service in detecting pathology of this posterior inferior surface.

Obviously, the ultimate aim is to be able to explore electrophysically all the areas of the heart, and to have no blind spots. That objective is almost, but not yet, fully achieved.

The electrocardiograph, extracted from the physiology laboratory just over a half-century ago, is a most useful tool of clinical cardiology, but it is not the only important one. History and physical examination are of paramount importance in a comprehensive evaluation of the cardiac status of an individual. The electrocardiogram serves as the third valuable adjunct in such evaluation. Of the total picture of heart function, the electrocardiogram furnishes information of a part — the electrical status of the cardiac muscle.

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THE USE OF TRILENE® IN OBSTETRICS

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This investigation of trichlorethylene as an obstetrical analgesic confirms previous reports of its value. Pain control was found adequate without significant depression of the infant's respiration.

The obstetrician constantly seeks a safe analgesic which can be administered easily. The usual anesthetic agents and technics present certain inherent dangers. Trichlorethylene, for obstetrical purposes, approaches the ideal of such an analgesic. It is safe for mother and baby, potent, cheap and easily administered.

HISTORY

Trichlorethylene, or Trilene®, was first described in 1864, and used shortly thereafter as an industrial solvent. As first used, the drug contained a large number of impurities which were toxic. Optic neuritis and fifth nerve palsy were the common toxic manifestations of these impurities. Inhalation of trichlorethylene fumes by industrial workers produced a pleasant drowsiness and euphoria. Therefore, the danger of addiction to the drug became apparent.[3]

In 1934, Jackson first suggested the use of trichlorethylene as an anesthetic agent in dogs.[5] Interest in the drug occurred for a brief period in the thirties, but this soon abated. The imminence of World War II created sufficient pressure among British anesthesiologists to search for a potent, non-explosive agent. Trichlorethylene was resurrected from the scrap heap, and developed into a safe agent principally through the efforts of C. Langton Hewer.[3] Since 1941, the drug has been widely used in Britain, some of the series running to 40,000 cases.[15] In the United States use of the drug has become widespread only in the past two years.

DESCRIPTION

Trichlorethylene is a chlorine-substituted derivative of ethylene, chemically akin to chloroform, and resembling the same drug in many of its physical and chemical properties. A purified preparation, containing 0.01 per cent thymol and colored blue to distinguish it from chloroform, is available for anesthetic purposes, under the trade name Trilene.®

TOXICITY

Some studies indicate that when trichlorethylene is used as an extraction agent, or solvent, it may have toxic effects.[10,11] Other studies indicate that when the drug is purified and used correctly for analgesic purposes there are no toxic effects.[6] At present it is certain that toxic effects are caused entirely by impurities, and that the chief offender is dichloracetylene.[4] Ostlere,[1] a British anesthesiologist, has used Trilene® in over 40,000 cases, and states he "never experienced any fatalities or incidents of collapse that could even remotely implicate trichlorethylene." It should be emphasized that trichlorethylene must never be used with soda lime since dichloracetylene is formed as the result of interaction, and this substance is highly toxic. The investigations on the toxicity of trichlorethylene may be summed up by quoting from a British report:

> The capacity to cause organic injury or morphologic change is of minor importance. This agrees with the results of nearly all other laboratory investigations, and apparently with the experience of human subjects using this solvent.[6]

This paper reports our clinical experience with Trilene® in the everyday practice of obstetrics. We shall not describe in minute detail the physiologic and pharmacologic properties of the drug. It is apparent, from the toxicity studies referred to previously, that there is no toxic effect of note on the parenchymatous organs. In 1934, Herzberg[5] reported that

* Presented before the Section on General Practice at the Annual Meeting of The Medical Society of New Jersey on May 19, 1953.

histologic study of tissues from dogs, killed by prolonged use of high concentrations of trichlorethylene vapor, showed no significant changes. Two reports appeared in 1951. Both found no effect on the liver, and one found no effect on blood chemistry or kidney function in addition.[2,4] In Ostlere's large series, there was no effect on metabolism.[1] Hewer, in 1950, reported complete absence of liver or kidney injury after long continued exposure to Trilene® vapor.[3]

In 1943, Waters, Orth and Gillespie in one series, and Gordon and Shackelton in another series of 100 cases reported that Trilene® produced undesirable effects on cardiac automaticity. Since then the British have shown that in several hundreds of thousands of cases, trichlorethylene has a unique safety record. The American authors were trying to produce deep anesthesia, and were using high concentrations. The British use low concentrations in conjunction with nitrous oxide and oxygen. This is the secret of safe and successful trichlorethylene administration. The concentration must be kept low, and it should be used only for analgesia, not for surgical anesthesia.[1,3,4,5,13]

SAFETY

Preferably, the drug should be self-administered, through an inhaler, such as the "Duke model" which was used in our series. Fifteen cubic centimeters of Trilene® will last about two hours. A concentration of 0.5 per cent in air is sufficient for analgesic purposes.[3] Cardiac arrhythmias may be expected if closed systems are used.[8] The respiratory effects of trichlorethylene are negligible. It is only slightly irritating to the mucous membranes and glands. The appearance of tachypnea during administration means overdosage. The only treatment is to stop the drug. After the respiratory rate has returned to normal, administration may be resumed.[1,2,3,4,9,13]

Patients not infrequently enter labor shortly after eating, or even eat during labor. Aspiration of vomitus is an ever present danger. With trichlorethylene, vomiting is minimal. The pharyngeal and laryngeal reflexes are maintained throughout. Therefore, the danger of aspiration of vomitus into the lower respiratory tract is avoided.[2,5]

ANALGESIA

The analgesic state has been defined as loss of sensation without loss of consciousness. Trichlorethylene has been found to be in a class by itself for the production of analgesia. The onset is very rapid, occurring within the course of several breaths. Recovery is almost equally as rapid.[5,7,9,13,15,16] The high analgesic potency eliminates or markedly reduces the need for other medication, such as opiates and barbiturates. This is of tremendous benefit to both mother and baby.

MATERIAL AND METHODS

This series consists of eighty unselected patients, chiefly from the practice of one of us (J.S.M.). Primiparas and multiparas are included, both white and Negro. The youngest patient was sixteen, and the oldest thirty-seven. We feel this represents a good cross-section of obstetrical practice in our area. All deliveries were carried out in the Salem County Memorial Hospital. A form was prepared on which to record data. The analgesic evaluation was arrived at in the following manner: At the end of stage 3, the obstetrician recorded his evaluation. After the patient became lucid enough to talk, she was asked a set of questions and her exact words recorded. All the patients were asked exactly the same questions each time. The least favorable reply relative to pain relief was the evaluation accepted. The results are summarized in Table 1.

TABLE 1. ANALGESIC EVALUATION

Pain Relief	Primiparas	Multiparas	Total	Per Cent
Complete	6	14	20	25
Good	12	36	48	60
Insufficient	3	9	12	15
Total	(21)	(59)		

Sixty-eight (85%) out of a total of 80 patients had either good or complete pain relief. Twelve (15%) had insufficient relief. It is our opinion that these figures are subject to revision in favor of Trilene.® Despite patients' claims of insufficient relief, it was necessary to add another anesthetic agent in only

four cases. One of these delivered a hydrocephalic monster in breech presentation, in which more adequate relaxation was required even though pain relief was adequate under Trilene.® In the remaining eight of the 12 cases recorded under "insufficient relief," the delivery was accomplished with Trilene® alone. We feel that 72 out of the 80 cases would be closer to the actual number of patients who obtained at least good relief. This is 90 per cent and approximates the results reported by other authors. [2,5,7,15]

COMPLICATED LABORS

It was deemed important to demonstrate that Trilene® is efficacious when used for pain relief in certain complicated labors. We are convinced that it supplies sufficient pain relief for those procedures which do not require high degrees of muscular relaxation. Suturing of lacerations and episiotomies, and forceps deliveries have all been satisfactorily accomplished in both primiparas and multiparas. Table 2 has been prepared to summarize these experiences.

Two patients were delivered of abnormal fetuses. One was a multiparous patient who went into spontaneous labor at 5 months. The feet of the fetus were presenting through a not-quite-fully dilated cervix. It was extracted by after-coming head forceps and lived only ten minutes. After this the cervix clamped down and prevented expulsion of the placenta. Hence a dilatation and curettage was necessary to remove the placenta. Trilene® alone proved sufficient for this procedure. The other was a hydrocephalic monster with an omphalocele and meningocele, in which the pain relief was good, but muscle relaxation insufficient. In this case, nitrous oxide and ether were required for deep surgical anesthesia.

In summation of the above data, we find that only 15 of the 80 patients had completely uncomplicated labors by our standards. They suffered no lacerations, and required neither episiotomy nor forceps application. Sixty-five had complication by our standards. Of the 15 uncomplicated labors, 11, or 73 per cent, had sufficient pain relief. Of the 65 complicated cases, 57 or 88 per cent, had sufficient relief. On the average, 85 per cent of both complicated and uncomplicated labors experienced sufficient pain relief; 15 per cent experienced insufficient relief.

PROGRESS OF LABOR

Particular attention was paid to the effect of trichlorethylene on the progress of labor and on spontaneous fetal respiration. Interference with the progress of labor has been reported on two occasions to our knowledge.[16,17] We have not found this to be true in our series. Four reports specifically point out that trichlorethylene has no effect on the progress

TABLE 2. ANALGESIC EFFECT OF TRICHLORETHYLENE IN COMPLICATIONS OF LABOR

	Primiparas			Multiparas			Total			Per Cent	
	Complete	Good	Insufficient	Complete	Good	Insufficient	Complete	Good	Insufficient	Sufficient*	Insufficient
Spontaneous (25)							3	16	6	76	24
No sutures		1	1	1	9	3					
Episiotomy		1		1	5	1					
Laceration				1		1					
Low Forceps (34)							11	19	4	88	12
No sutures				5	6	1					
Episiotomy	4	6	1	1	7	2					
Laceration				1							
Mid Forceps (15)							3	11	1	93	7
No sutures				2	4						
Episiotomy	1	4	1		3						
High Forceps (4)							2	2		100	
No sutures	1				1						
Episiotomy				1							
Laceration					1						
Abnormal Fetus (2)							1		1	50	50
Premature				1							
Hydrocephalus						1					

* Sufficient indicates either complete or good analgesia.

of labor when properly administered.[4,5,9,15] A report[4] published in 1951, reviewing an experience with 1200 cases, states that under trichlorethylene analgesia the incidence of forceps deliveries was decreased. Prior to the use of Trilene®, the incidence of forceps was 43 per cent in multiparas and 57 per cent in primiparas. Since the use of Trilene®, the incidence was reduced to 18 per cent and 32 per cent respectively. We are unable to offer comment on this report. Our study was not designed to obtain information regarding the incidence of forceps deliveries under Trilene®.

EFFECT ON FETUS

We believe that the most important single observation in this series was the absence of a deleterious effect on spontaneous fetal respiration. We did not have a single incident of fetal respiratory depression. There were 3 cases of fetal distress. One was the 5-month fetus that lived only ten minutes. The second was an infant with severe cyanosis of the face due to an umbilical cord wrapped tightly around its neck with two turns. This infant was successfully resuscitated. The third was a multiparous patient who required high forceps application for rotation from an occiput posterior position to an occiput anterior. This patient was given two 40 milligram doses of Nisentil® 6 hours and 3 hours before delivery. We feel that this was responsible for fetal respiratory depression in this instance. Our experience with fetal respiration under Trilene® agrees with previous reports.[3,4,5,9,13,15,16]

SYSTEMIC DISEASE

Our experience in this series included 12 cases complicated by systemic disease. These complications are illustrated in Table 3.

TABLE 3. USE OF TRICHLORETHYLENE IN SYSTEMIC DISEASE

Systemic Complication	Primiparas	Multiparas
Toxemia	6	4
Thyrotoxicosis	0	1
Pneumonitis	0	1

Trichlorethylene had no adverse effect on these patients. Observations on pulse, blood pressure, and respiration revealed no abnormal findings.

UNPLEASANT EFFECTS

One third of the patients, when asked, "What specifically did you mind about Trilene®?" mentioned some subjective complaints that are not at all serious, but may be called unpleasant side effects of the drug. We have listed these in Table 4.

TABLE 4. INCIDENCE OF SUBJECTIVE SIDE-EFFECTS

Subjective Complaints	Number	Per Cent
None	46	58
Respiratory	12	15
Gastrointestinal	9	11
Olfactory	5	6
Mental	4	5
Gustatory	2	2.5
Cutaneous	2	2.5

There were 46 patients (58%) who didn't mind Trilene® at all. Twelve patients complained of choking, smothering or coughing. Nine patients had nausea or vomiting. Five complained of the drug's bad odor or that it made their noses dry. Four patients had weird dreams, "bad feelings" or a headache. Two patients said it had a bad taste or was too sweet. Two fair-skinned patients received a first-degree burn when some of the solution leaked through the inhaler. For this reason we think it very important that care be taken to fill the mask without spilling, and that the rubber protection be dry before using.

SUMMARY

1. Trichlorethylene approaches the ideal analgesic agent in obstetrics where deep muscular relaxation is not required.

2. Systemic effect on the mother is negligible.

3. It has no effect on fetal respiration.

4. It does not slow labor.

5. It was used in 12 cases of complicating systemic disease without ill effect.

6. Some patients experience unpleasant subjective sensations, which are not serious.

7. Liquid trichlorethylene in contact with the skin may produce a first-degree burn.

8. Trichlorethylene is particularly useful where trained anesthesia personnel are not available.

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DIAMOX, A NEW ORAL DIURETIC

In 1945 it was observed that inhibition of carbonic anhydrase activity in the renal tubular cells not only impairs the secretion of hydrogen ion but also diminishes the retention of sodium, which is an essential feature in the diuretic therapy of heart failure. Sulfonamide compounds were found to be specific carbonic anhydrase inhibitors. An investigation was therefore undertaken to find a sulfonamide compound which would be an active carbonic anhydrase inhibitor without toxicity. One of these compounds, Diamox®, also known as compound 6063 (2-actylamino-1,3,4-thiadiazole-5-sulfonamide) was found to be 50 to 400 times as active a carbonic anhydrase inhibitor as sulfanilamide. Animal experiments have shown that Diamox® is non-toxic and when given intravenously to animals or humans it causes a marked increase in the excretion of sodium.

Freidberg, *et al.*,[1] have reported on the diuretic action of Diamox® in twenty-six patients with congestive heart failure. Diamox® prevented the secretion of an acid urine and was found to promote the excretion of sodium and potassium. Eighteen patients had adequate diuresis, weight loss and clinical improvement after the oral administration of Diamox®. The results compared favorably with those following parenteral mercurial diuretics. Toxic effects were insignificant and did not require discontinuation of the drug. The most effective dosage in this series appeared to be 0.25 gm. three times a day for two days with courses repeated every two to seven days or continuous daily administration at the dose indicated.

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TYPHOID FEVER—REPORT OF TWO CASES IN SUBURBAN NEW JERSEY*

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Two cases of typhoid fever, a rare disease in this state, are reported. Both responded to chloramphenicol.

Typhoid fever is no longer commonly seen in suburban New Jersey, and many physicians rarely, if ever, see it.

We are reporting two cases of typhoid fever from the Medical Department of the Morristown Memorial Hospital as a reminder that it still exists.

Neither of the authors had ever seen typhoid fever before, and were it not for blood culture studies, the diagnosis very likely would not have been made. Since the diagnosis in these cases was established by blood culture, we urge a careful bacteriologic examination *before* antibiotic therapy is administered to severely ill patients in whom the diagnosis is not immediately apparent.

CASE REPORTS†

No. 1. A 7-year old white boy was admitted on March 23, 1953, complaining of fever, nausea, emesis, and left hip pain of four days' duration. The temperature had fluctuated between 101 and 104 degrees, and was 105.2 (rectal) on admission.

The patient's past history was not contributory. The family history was not significant except that the father had "an attack of flu" for several days prior to the admission of this patient.

The patient was seen by his family physician for the first time on the day of admission. One dose of Aureomycin® was given. Later, because of persistent high fever, the child was admitted to the hospital.

On admission the patient appeared acutely and critically ill. Significant physical findings included a dry tongue, a heart rate of 132 per minute, a diffusely tender abdomen with hyperperistalsis, and tenderness over the left hip.

The initial blood count showed 11,400 white cells with 5 per cent granulocytes; subsequent counts always showed a lenkopenia and relative lymphocytosis. A blood culture taken on admission was identified 48 hours later as *Salmonella typhosa*.

Later the same organisms were cultured from the stool and blood on several occasions. Identification of the organisms was confirmed by the laboratory of the New Jersey State Department of Health, Trenton. X-ray examination of the left hip revealed an osteochondroma of the left ischium.

The patient made an excellent recovery on chloramphenicol and supportive treatment. The temperature returned to normal in five days and he was completely well after two weeks of antibiotics.

Repeated stool, urine, and blood cultures were subsequently negative.

No. 2. A 35-year old white male, father of the first patient, was admitted on March 26, 1953, complaining of malaise, chills and fever of 12 days' duration. The day before admission these complaints became worse and the patient developed diarrhea.

Physical examination was entirely normal except for accentuated peristalsis of the gastrointestinal tract. Because of the experience with his son, a blood culture was taken on admission. *S. typhosa* was found in the blood and confirmed by the state laboratory. The blood count and urine were normal; Widal reaction was 4 plus in 1:180 dilution.

The patient responded to Chloromycetin® and fluid therapy and made an uneventful recovery except for an episode of persistent hiccough. He became afrebrile after five days of treatment and remained symptom-free. However, although the antibiotic was continued for two weeks, stool cultures were again positive one week after Chloromycetin® was discontinued. He was then retreated with Chloromycetin® for a three week period and was finally discharged from the hospital completely well, with negative stool and urine cultures.

The patients and their family were quizzed for sources of infection, but none were found. A few days later they learned that a child acquaintance was in a nearby hospital with undiagnosed fever.

On suggestion from our group, special studies were done and the diagnosis of typhoid fever was established in this contact at the other hospital.

The New Jersey Department of Health studied 39 contacts of our patients as well as the water supply on their farm; no source for the infection was found. The wife of the second patient (mother of the first one) and an-

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† Referred by F. C. Bowers, M.D., Mendham, N. J.

other child suffered a transient, mild, febrile episode on the day the latter was admitted to the hospital. Their illness was brief and self-limited.

SUMMARY

Bacteriologic diagnostic studies should be done before antibiotics are administered to severely ill patients in whom the diagnosis is not known. Typhoid fever, though rare, is still seen occasionally in New Jersey; it is well to keep it in mind in obscure, severe, febrile syndromes.

We are indebted to Richard Graft, M.D., Nathan Kaplan, M.D. and Joseph P. Bochenek, M.D. for their assistance.

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ENHANCEMENT OF LEAD EXCRETION

Ethylenediamine tetra-acetic acid (EDTA), or Versene®, is a synthetic chelating agent used industrially for the control of cations in solution. When administered to animals or humans its major acute action is to lower the systemic calcium level for short periods. In large doses hypocalcemic tetany occurs. This effect can be overcome by using preformed calcium chelate. Since the calcium in this complex may be displaced by other metals, including lead, its possibilities in metal poisoning have recently been studied. A significant increase of lead excretion from rabbits given intravenous lead acetate was produced following the administration of calcium EDTA. Because of these favorable findings, and because of its demonstrated non-toxicity, disodium calcium ethylenediamine tetra-acetate was given to 11 cases of lead poisoning in humans. In a detailed study of four of these cases, reported in *Science*,[1] the intravenous infusion of 0.5 or 1.0 gram of calcium resulted in marked enhancement of the lead excretion in patients suffering from acute and chronic lead poisoning.

If these preliminary investigations are confirmed by other studies, an important adjunct to the treatment of plumbism will have been attained.

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NEPHRITIC EDEMA

Peters[1] has recently reviewed the clinical records and laboratory data of 291 patients with acute nephritis who have been seen at the New Haven Hospital in the past thirty years. A careful analysis was made of clinical symptoms such as dyspnea, orthopnea, basal rales, pleural effusion, cardiac enlargement and hepatomegaly. X-ray findings of enlarged heart, pulmonary congestion and pleural effusion were evaluated. Measurements of venous pressure and circulation times were made and the effect of digitalis noted. These findings were compared with determinations of blood nonprotein nitrogen, serum proteins and other laboratory studies such as serum sodium and chloride levels. Autopsy material was also used in arriving at the conclusion reached.

Based on this review of hospital data Dr. Peters has concluded that in acute glomerular nephritis edema is due to congestive heart failure rather than to direct renal involvement. This cardiac failure is not related to the presence of hypertension but appears to be a reflection of myocardial injury, a finding which has been confirmed by autopsy studies done by other investigators.

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SKIN ERUPTIONS OF PREGNANCY*

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Dermatoses of pregnancy are often manifestations of a previously present skin lesion aggravated or alleviated by child bearing. The dermatologic findings in 150 cases are summarized.

It is not correct to consider all skin diseases that occur during gestation as due to the pregnancy itself. Pregnant women are no more affected by skin disease than the general population, and the pregnant woman is subject to all eruptions of the skin that occur in the nonpregnant. We have all noted that there are physiologic changes in the skin associated with pregnancy; *e.g.,* pigmentary changes of the genitalia, areolae of the breasts and umbilicus, growth of hair, edema of the skin, hyperhidrosis, pruritus, striae albicantes, urticaria, gingival changes, vasomotor disturbances, etc. All clinicians, however, have observed such changes in association with systemic disorders of various etiology. There are, however, certain eruptions seen only during pregnancy, *e.g.,* prurigo gestationis, herpes gestationis, impetigo gestationis and multiple spider nevi. In some instances gestation has been noted either to aggravate or ameliorate a pre-existing eruption of the skin.

The general practitioner, obstetrician and dermatologist alike usually attribute the symptoms and skin lesions of the pregnant patient to her pregnancy and aim to provide symptomatic relief only, unless the clinical picture is a severe or unusual one. There have been but three recent reports on this problem.[1,2,3] Crawford and Leeper [3] were the first to provide actual statistical information.

Costello [1] has arbitrarily divided the eruptions associated with pregnancy and the puerperium into those that are endocrine in nature, *i.e.,* due either to a diminution or increase in anterior pituitary gonadotrophins, and those that are toxic and neurogenic. Another division of these eruptions on a clinical basis has been suggested [2] to include those precipitated, those aggravated and those benefited by pregnancy.

A survey was made of the dermatologic complaints of 150 pregnant women in private practice in comparison with the diagnoses with other series. It was found that pruritus which occurs during the middle and latter half of pregnancy was the most frequent complaint. It was often generalized, but frequently localized primarily in the vulval and anal areas. Many of the cases of generalized pruritus showed no skin lesions except severe excoriations. In all of these, examinations of the urine and blood were done to rule out diabetes mellitus. In the cases of pruritus ani and vulvae, examinations for trichomonas vaginalis, oxyuris vermicularis, yeasts and other fungi were made. The vaginal discharge produced by the trichomonas caused severe itching with a secondarily infected intertriginous dermatitis. The most common fungi were monilia albicans and epidermophyton inguinale. The former produced severe itching with a moist macerated and thickened eruption in the genitocrural areas and the latter a slightly elevated, well demarcated, erythematosquamous lichenified process. Since the idiopathic pruritus and nonmycotic pruritus ani et vulvae tend to disappear after delivery, and seem to recur with subsequent pregnancies, Costello [1] feels that they can be explained best on an endocrine or neurogenic basis.

Vascular changes of the skin in pregnancy are commonly seen. The vascular "spiders" seen in these women are made up of a body or central point which may project above the skin with branching legs and surrounding erythema. These lesions are most common on the face, neck, upper chest and arms. Observations [4] on 1,243 women in an obstetric clinic

* Read before the Section on Dermatology, Annual Meeting of The Medical Society of New Jersey, May 20, 1953.

revealed an incidence of 67 per cent in white and 11 per cent in Negro women at some time during pregnancy. This incidence was significantly higher than the 12 per cent incidence of these lesions in nonpregnant white women who had borne one or more children. Spiders tended to appear during the second to fifth month of pregnancy and slowly increased in size and number until term. In our series, this condition was found in 12 patients, and in all cases most of the lesions faded and disappeared within 8 weeks after delivery.

Palmar erythema was found in 14 cases. Bean, *et al.*[4] report that this was found in almost two-thirds of white women and one-third of Negro women during pregnancy. This difference is probably due to differences in skin pigmentation. They conclude that there is no proof for the common supposition that a single mechanism operating during pregnancy may cause either vascular spiders or palmar erythema or both. When either of these vascular changes was found the other was twice as likely to be present in the same individual, an observation suggesting, but not proving that there might be a common cause. Liver function tests did not indicate a significant hepatic abnormality and were the same in patients with cutaneous vascular changes and in those without. There was no marked difference in the incidence of vascular spiders or palmar erythema between subjects who later manifested toxemia and those who did not. Further work is being done to determine whether or not these lesions develop in response to prolonged high estrogen levels in the blood.

Herpes gestationis is considered by some as the only skin disease peculiar to pregnancy. Clinically this disease may be indistinguishable from dermatitis herpetiformis except that the characteristic pigmentation and scarring of the latter are relatively insignificant or absent. Dermatitis herpetiformis is relatively rare in women and its duration is usually a matter of years. Herpes gestationis usually begins during the last trimester of pregnancy or in the early post-partum period and almost invariably disappears shortly after delivery. It is prone to recur with succeeding pregnancies, and miscarriages, still-births and monstrosities have been reported associated with it. Costello[1] has reported a patient who delivered an anencephalic infant with a spina bifida in the second pregnancy in which the eruption occurred. There is a report[5] of a death following cesarean section in a woman with this disease who developed peritonitis and sepsis although no vaginal examinations had been made prior to operation; it was felt that the infection was caused by incision through the affected skin. Keaty and her co-workers[6] have reported 10 patients with herpes gestationis who were seen early in the disease when the symptoms were either a localized or generalized pruritus. The early lesions were small erythematous papules or vesicles which appeared in groups resembling dermatitis herpetiformis. The onset was during the first trimester in two patients, during late pregnancy in seven and twenty-four hours post-partum in one. During twenty previous pregnancies in this group there had been a 30 per cent fetal mortality, one premature infant, and the dermatosis had appeared seven times in four patients. In these ten cases, five patients had moderate to severe edema and four had albuminuria. Persistent headache, red blood cells in the urine and hypertension appeared in three. In seven patients the blood chorionic gonadotrophin levels were abnormally high (averaging 3,125 rat units per hundred cc. normal, 500-750). Since excess chorionic gonadotrophin in the later stages of pregnancy has been shown to be associated with decreased production of progesterone, substitutional therapy with progesterone was used with intramuscular injections of Proluton.® All ten pregnancies terminated in living normal infants with one instance of survival after premature delivery at 8 months. In the two cases in this series, delivery was normal and there were no further complications. In the eleven cases reported by Crawford and Leeper[3] all the infants were born normal except one premature baby who had icterus. Two women had a mild toxemia of pregnancy and another had pyelitis.

Lupus erythematosus was found in three patients. All of these were of the chronic discoid type which had been present prior to the pregnancy. In all cases there was increased scaliness and erythema of the lesions during

gestation which cleared slowly after delivery. In the three cases reported by Crawford and Leeper[3] one patient had the chronic discoid variety for one year and was pregnant for the fifth time. The disease became worse during her gestation, but pronounced improvement occurred within one month after delivery. The other two women had the chronic discoid type which became disseminated during pregnancy. One died the first post-partum day. The other gave birth to a dead child at the end of the eighth month. Five years later exacerbation of the disease occurred and the patient died. The conclusion is that the prognosis for patients with extensive lupus erythematosus who become pregnant may be poor and these patients should be watched closely.

TABLE

Subdivision of Dermatologic Diseases found in 150 Private Patients

Diagnosis	Number of Cases
Pruritus	36
Idiopathic generalized	12
Temporary glycosuria	1
Pruritus ani et vulvae	23
Trichomonas	6
Monilia albicans	4
Epidermophyton inguinale	4
Oxyuris vermicularis	1
Non-mycotic	8
Vascular spiders	12
Herpes gestationis	2
Lupus erythematosus	3
Palmar erythema	14
Prurigo gestationis	3
Dermatitis medicamentosa	20
Barbiturates	8
Penicillin	8
Phenolpthalein	4
Urticaria	6
Dermatitis venenata	16
Psoriasis vulgaris	4
Herpes simplex	14
Miscellaneous	20
Pityriasis rosea	4
Gingival hypertrophy	3
Chloasma	4
Nevus pigmentosus	5
Condylomata acuminata	4

There were three cases of prurigo gestationis. This manifested itself in the form of a persistent papular eruption about the abdomen, buttocks and thighs. The eruption consisted of discrete tiny scratched papules usually covered with blood crusts. It has been reported on the extensors of the arms and forearms, dorsi of the hands and feet, shoulders and chest. Its onset is gradual and usually disappears at delivery, leaving small hyperpigmented areas at the sites of the lesions. In some instances reported in the literature itching was only relieved by induction of labor.

In the twenty cases of dermatitis medicamentosa, eight were due to barbiturates, eight to penicillin and four to drugs containing phenolphthalein. In the six cases of urticaria, no cause could be found but it is interesting to note that three women had hyperemesis gravidarum, two gave a history of hayfever and asthma and one had recurrent attacks of pyelitis.

In the four cases of psoriasis vulgaris, all had lesions of this eruption for periods of between three and twelve years. Three seemed to improve during pregnancy and one case became generalized. Others have reported cases in which the lesions of psoriasis recurred only during pregnancy and cases in which the lessions appeared for the first time during this period. In a series of sixteen cases by Crawford and Leeper,[3] four showed some toxemia of pregnancy and five cases showed abnormal placentae.

Herpes simplex was seen involving the lips and cheeks for the most part. In three cases the lesions involved only the labia majora. In seven women there was a history of recurrent lesions prior to pregnancy and all reported the appearance of the eruption from three to five days prior to the menstrual period.

The cases with dermatitis venenata included sensitization to cosmetics, contact with noxious plants, sprays containing pyrethrum and DDT, household chemicals, etc. In none of these sixteen cases were there any deleterious effects on the pregnancy.

In the miscellaneous group are included: pityriasis rosea, proliferative gingivitis, chloasma uterinum, nevus pigmentosus and condylomata acuminata. The patients with the nevi were apprehensive because of increased size and pigmentation in the lesions. All were biopsied for histologic study and none showed malignant changes. The cases with chloasma were psychologic problems and in three cases

all the pigmentation disappeared after delivery. In the one remaining patient, the pigmentation remained after delivery and traces are still present four years later. The condylomata were all covered with a foul exudate and required intensive therapy with 15 per cent podophyllum in tincture of benzoin compound to avoid infection and other complications at delivery.

Although they do not appear in this series of cases, mention must be made of recalcitrant eczema of the breasts during pregnancy and the possibility of Paget's disease. Other conditions worthy of mention are the severe complications associated with erythema multiforme and impetigo herpetiformis. The occurrence of fibroma molluscum gravidarum, which is analagous to the cutaneous tags observed during the menopause has also been noted. These are soft fibromas and are apparently the result of ectodermal stimulation by the gonadotrophic hormones. Edema of the face, hands, feet, ankles and eyelids is seen commonly. This type of edema does not pit on pressure, appears in the morning and seems to improve during the day. These features distinguish this type of edema from that produced by cardiac insufficiency, kidney or liver disease or mechanical causes.

A recent report in the literature[7] presents a case of pemphigus in a young pregnant woman. The authors emphasize the rarity of this disease during pregnancy and report a beneficial effect during the first and third trimesters which may be related to the rise in output of endogenous adrenal cortical hormones. An investigative study by Burckhardt and Szadurski[8] suggests that pregnant women have the fastest rate of return of skin temperature after a cold bath and that women in the reproductive period have the slowest. This correlates well with the clinical findings that peripheral disturbances in circulation improve during pregnancy.

CONCLUSION

It is hoped that the material presented will emphasize how difficult it is to label definitely any skin eruption as one peculiar to pregnancy. Some feel that this may be said only of herpes gestationis; others would include prurigo gestationis and impetigo herpetiformis. Further statistical and clinical studies are necessary in large medical centers with close cooperation between the obstetrician and dermatologist to clarify further the actual and possible causative factors in this problem.

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USE OF A PURIFIED NON-PROTEIN BACTERIAL COMPONENT, PIROMEN®, IN ALLERGIC CONDITIONS*

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Abolghassem Ghaemi, M.D.,‡ Teheran, Iran

Piromen®, a non-protein polysaccharide extract of bacterial origin, was found useful in managing allergic disease refractory to other forms of treatment.

In the absence of specific therapy for certain disease, nonspecific measures must be used, often with benefit to the patient. Perhaps the most outstanding recent example of this is the use of ACTH and cortisone.

It has long been known that patients frequently have constitutional reactions following the administration of fluids intravenously. These reactions were believed due to contamination of the solutions with pyrogens. Extensive investigations have suggested that these pyrogens are polysaccharides. Nesset [1] and his colleagues at Northwestern University have studied the pyrogenic factor obtained from a *Pseudomonas* species, selected because it is not commonly pathogenic and can be cultured easily. By deproteinizing the *Pseudomonas* cells by trypic digestion they obtained a pyrogenic concentrate which was given the name Piromen®.§ The active factor is apparently a complex polysaccharide and contains hexosamine as the only reducing sugar.

Piromen® is supplied as a stable colloidal dispersion in tenth normal saline solution. It is non-protein, non-anaphylactogenic and non-antigenic.

The early studies of the action of Piromen® were primarily concerned with its activity as a pyrogenic agent. Lonson and Liebert [2] studied its effect in neurosyphilis. Page and Taylor [3] used it in their studies on arterial hypertension and Kierland and Kulwin [4] used it in dermatologic conditions. Laboratory studies by Soylemezoglu and Wells [5] have shown that the alteration of the white blood count induced by intravenous pyrogen resembles that produced by stress, or the administration of ACTH or adrenal steroids. They noted, however, that the removal of the adrenals substantially modifies the response to ACTH in the dog, but is without effect on pyrogen-induced leukocyte responses. They concluded that pyrogen produces its characteristic changes in the white cells by mechanisms other than pituitary-adrenal discharge. There is an initial leukopenia with diminution in the number of all white cells. This is followed by a leukocytosis, mainly of the myeloid elements and a sustained lymphopenia and eosinopenia. These blood changes are similar to those which have been observed following experimental ingestion of an allergenic food [6,7] or drug [6] in specifically sensitized patients and to those following administration of ACTH.[9,10,11] The observation that hyperpyrexia is sometimes of benefit in asthmatic patients and the similarity of the blood response to Piromen® to that of ACTH led to the use of Piromen® in allergic conditions.

The intravenous injection of Piromen® has the following effects: (1) Stimulation of the reticulo-endothelial system, (2) increased granulocytosis, (3) moderate lymphoid hyperplasia,[12] (4) stimulation of the adrenal cortex,[12,15] and (5) if given in sufficient dosage, elevation of the body temperature.[2,4,12] As has already been noted, the early workers with Piromen® were concerned with its effect as a readily controlled pyrogenic agent and felt that the pyrexial response was necessary in order to obtain a therapeutic response. However,

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* Read before the Section on Allergy at the Annual Meeting of The Medical Society of New Jersey, Atlantic City, May 19, 1953.
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§ Piromen ® was supplied through the courtesy of R. P. Herwick, M.D., Medical Director, Travenol Laboratories, Inc., Morton Grove, Ill.

further experiences with the drug demonstrated that a favorable therapeutic response could be obtained by using much smaller doses and that the pyrexial reaction was not necessary in order to obtain a favorable clinical result. Furthermore, it was also demonstrated that in many cases, the drug was also effective if given subcutaneously or sublingually.

In this study, we have used the subcutaneous and intravenous routes of administration. In many cases, the drug was first administered subcutaneously for several doses and if there was no clinical response the intravenous route was used. However, in the more seriously ill and more urgent cases, the intravenous route was used from the first. Piromen® is supplied as a colloidal dispersion in normal saline in two strengths of 4 gamma (mcg.) and 10 gamma (mcg.) per cc. The initial dose, whether intravenously or subcutaneously, was usually 1 gamma. However, experience demonstrated that if given subcutaneously the initial dose could be 2 gamma without any likelihood of constitutional symptoms. Subsequent doses were given at intervals of two to four days. If given intravenously, the dose was increased by 1 gamma with each subsequent injection until a constitutional reaction was obtained or until 10 gamma was reached. No patient was given more than 10 gamma per injection by either route. If the subcutaneous route of administration is used, it is safe to increase the dose by 2 gamma per injection. In most cases none of the side effects of the drug were elicited. Side effects, when they occurred, usually came on within a few minutes to about 3 hours and consisted of one or more of the following: chills, fever up to 104° F., nausea, vomiting, or headache. They usually occurred in those patients receiving the drug intravenously. The constitutional effects last only a few hours and can be treated symptomatically. Some patients had these reactions when 0.5 gamma was given intravenously, others not until 10 gamma was reached, and others at any level in between. When constitutional symptoms occurred, the next dose was reduced to the level of the previous dose without such symptoms. An attempt was then made to raise the dose on subsequent injections and if constitutional symptoms were again obtained, the patient was maintained on a dose just below this level. Almost none of these reactions were seen in patients receiving the drug subcutaneously.

In this study we have used this drug in a variety of allergic conditions which includes: (1) drug eruptions, (2) contact dermatitis, (3) dermatitis venenata, (4) dermatitis medicamentosa, (5) urticaria and angioneurotic edema, (6) atopic dermatitis, (7) neurodermatitis, (8) bronchial asthma, (9) hay fever, (10) vasomotor rhinitis, and (11) serum reactions. The following table summarizes our results in these cases.

TABLE

	Total	Good	Fair	Poor
Contact dermatitis	13	12		1
Drug eruption	6	6		
Urticaria and angioneurotic edema	10	8		2
Atopic dermatitis	6	5		1
Neurodermatitis	10	7		3
Vasomotor rhinitis	2	2		
Hay fever	2	2		
Bronchial asthma	19	12	2	5
Serum reactions	2	2		
Local reaction to poison ivy injection	1	1*		

CASE REPORTS

No. 1. A. F., an eighty-year old white female was first seen on January 10, 1952. She had an acute diffuse, erythematous maculopapular eruption which had started on the face and had spread to involve almost the entire body. This eruption was intensely pruritic and the patient was in acute distress. She gave a history of having had repeated gold injections for arthritis and the eruption had the appearance of a drug eruption. She had had various antihistamines and cortisone (4 Grams) without relief.

On January 10, 1952, she was given 0.5 gamma of Piromen® subcutaneously with considerable improvement within twenty-four hours. Four days later she received 1.0 gamma subcutaneously with further improvement. She continued to receive injections at three to four day intervals, the dose being increased by 1 gamma until 5 gamma was reached. After four injections, her eruption had cleared completely and only pruritus remained. She was continued on 5 gamma doses of Piromen® at three to four day intervals for another eight injections at which time her skin remained clear and she was entirely free of pruritus.

No. 2. S. L., a ten-year old white female had a history of eczema as an infant. She also had hay fever for about five years. Her mother has hay fever. For about six to seven months she had had a severe eczematous eruption involving the face, arms, buttocks, and feet. The dorsum of the right

foot presented a raw, red, macerated appearance. The eruption in the other areas varied from a dry scaliness to a papulovesicular eruption. She had been treated by at least three other physicians for this condition and brought in a list of over fifteen medications which had been tried at one time or another without relief. She received two injections of Piromen® subcutaneously at two day intervals, without improvement. Her condition was so severe that it was felt advisable to hospitalize her. She was treated with bed rest, wet dressings, and bland ointments with only slight improvement. She received several injections of Piromen® intravenously but because of severe chills and fever she did not wish to continue further injections. At the end of three weeks she was discharged from the hospital only moderately improved. On March 21, 1953, she was again prevailed upon to try the Piromen® intravenously. She received 0.5 gamma intravenously on that date. On March 24, when she returned for her next injection, there was already considerable improvement. She has continued to receive injections twice weekly and has been steadily improving. The raw area on the right foot has completely healed and the eruption in the other areas has almost completely disappeared. This patient had side reactions of pyrexia up to 104°F. and headache when she was given 5 gamma intravenously. She is being maintained at 4 gamma without reactions. She is receiving no other therapy at present.

No. 3. G. B., a forty-two-year old white male had had a herniorrhaphy about a week previously and had received a number of injections of penicillin while in the hospital. When he was seen on May 26, 1952, he had a severe angioneurotic edema involving the face, hands, arms, and feet. He was given an injection of 10 cc. of Neocalglucon® intravenously and 2 gamma of Piromen® intravenously. This was followed very shortly by severe chills. The next morning his condition was even more marked than on the previous day. He was again given 2 gamma of Piromen® intravenously and arrangements were made to admit him immediately to the hospital. When seen about two hours later, the swelling of his hands had gone down about fifty per cent. He continued to receive further daily doses of Piromen® while in the hospital with progressive improvement and was discharged improved after five days. There was no recurrence when therapy was discontinued.

DISCUSSION

Our cases can be grouped roughly into 2 categories, the acute cases who required immediate relief for their symptoms and the chronic cases who either were not doing well with the usual allergic management or who were having an exacerbation of their condition.

In the first category can be included the acute urticarias, angioneurotic edemas, and more acute allergic dermatoses. In the second group are the asthmatics, nasal allergies, and the chronic allergic dermatoses.

When we first began using this drug, most of our cases were treated by subcutaneous injection and if no response was obtained the medication was administered intravenously. While a certain number of cases did show excellent results by the subcutaneous method, we felt that we lost valuable time in some cases by not giving the drug intravenously from the start. Also, in quite a number of cases we obtained a good response by the subcutaneous method. However, it is our opinion that the intravenous route is preferred because the likelihood of a good response is greater than with the subcutaneous method.

All our cases were studied and treated from an allergy standpoint where their condition permitted. The best results in the nasal, asthmatic, and chronic skin cases were obtained when allergy management was combined with Piromen® therapy. In the dermatoses cases, particularly, the drug was valuable not only in alleviating the symptoms but also in clearing the skin sufficiently to permit testing where indicated. The drug apparently did not affect the ability of the skin to respond to testing. In the nasal allergies and the asthmatics, the drug was used to supplement the usual allergic management where enough relief was not being obtained by such management or where there was an exacerbation of symptoms. In some of the cases the use of Piromen® succeeded in causing a remission. When Piromen® was discontinued, the patient continued to maintain his improvement with only the usual allergic management.

Although Piromen® has been used in much greater dosage than in our hands, we do not feel that a pyrexial response is necessary to obtain a good result. However, it was observed that in several of the patients the beneficial results were not evident until constitutional symptoms began to occur, but it should be noted that the dosage level in these cases varied from four to seven gamma, and sometimes less. It is possible that if we had used higher doses we might have had a more favorable result in some of the cases which failed to respond. However, the chills were so severe

in a few that the patients declined to continue further treatment with this drug. This was another reason why the dosage was kept low.

In our experience, Piromen® has proved to be a safe drug with only transient side effects in a few cases and has proved a useful adjuvant to allergic management.

SUMMARY

Piromen® is a stable, colloidal dispersion of a bacterial polysaccharide derived from a *Pseudomonas* species. In the doses used, we have found it is safe, non-toxic and a useful adjuvant in the management of a variety of allergic manifestations.

50 Glenwood Avenue

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DR. JOHNSEN HEADS NATIONAL SOCIETY

At the annual meeting of the National Gastroenterological Association held in Los Angeles on October 12, Dr. Sigurd W. Johnsen of Passaic was elected president. Dr. Johnsen is a Fellow of our Society.

Dr. S. Bernard Kaplan of Newark was re-elected to the National Council of this association for a four-year term.

Medical-Surgical Plan of New Jersey

"New Jersey's Blue Shield Plan"

WHY "SERVICE BENEFITS?"

Medical-Surgical Plan, like most Blue Shield plans throughout the United States, is known as a "service benefit" plan. This means that, for patients in the lower income brackets, benefits provided under the Plan Contract take the form of fully paid *services* rendered by "participating physicians," rather than merely cash indemnity payments to the Subscribers.

In the case of the New Jersey Blue Shield Plan, the Participating Physicians have agreed to accept the Plan payment as payment in full for any services covered by the Subscription Contract, provided the annual income of the Subscriber is not more than $5,000 at the time services are rendered.

Plan payment may be only an indemnity against the physician's charge in those cases where the physician is not a "participating physician" or where the annual income of the Subscriber at the time services are rendered is in excess of $5,000.

More than 80 per cent of all physicians in New Jersey are cooperating with the Plan as Participating Physicians. This reflects great credit upon the public spirit of the profession.

It is a simple historic fact that, without the service benefit program offered by Blue Shield, the voluntary health insurance movement could never have developed into the major factor that it has become. For the service benefit feature of Blue Shield—like the inclusive benefit feature of Blue Cross—has been the dominant attraction for the great masses of people in the lower income brackets. It has met their need for a plan that will guarantee fully paid medical services for expensive illnesses and operative conditions.

When anyone buys an insurance policy, he wants to be assured that his premiums will purchase him a certain amount of benefit, should he suffer the misfortune against which he seeks insurance. If his income is small, he *must* have this assurance. He must know that his payments will *cover* the costs against which he is purchasing protection.

Cash indemnity insurance has been available for many years, but only when the medical profession banded together under the aegis of its own Blue Shield Plans to offer *service benefits*, did the voluntary health insurance movement become a major factor in meeting the basic problem of medical economics.

The service benefit principle does great credit to the entire medical profession in the eyes of the public, because it subordinates the factor of cash and stresses the provision of service to the low income patient. It dramatizes the service traditions of the profession.

Again, the service benefit feature protects the profession as well as the patient against the predatory instincts of those few physicians, if any, who think that people buy health insurance in order to enable them to pay more for medical service than they would if they weren't insured.

The service benefit feature provides the one incontrovertible reason for the existence of the Blue Shield non-profit, medically endorsed plans. Blue Shield, through this feature, gives every physician an opportunity to take a concrete part in the solution of an urgent national problem.

Blue Shield thus enables each physician to contribute to the preservation of the freedom and integrity of American medicine.

In our judgment, if it were not for the service benefit feature of the Medical-Surgical Plan, the Plan would have little justification for its existence, and the great contribution that has been made by the vast majority of our colleagues in New Jersey would be much impaired. Without Blue Shield, the eventuality of a national compulsory health insurance program would be inevitable, for there can be no doubt that the overwhelming majority of our patients would never be satisfied with a commercially operated program offering them mere cash indemnities rather than a service benefit plan.



ROYAL A. SCHAAF, M.D., President
Medical-Surgical Plan of New Jersey

ANNOUNCEMENTS

WILLS EYE HOSPITAL MEETING

The Wills Eye Hospital, 1601 Spring Garden Street, Philadelphia, announces that its Sixth Annual Clinical Conference will be held February 19-20, 1954. A feature of the program will be color television.

PAN AMERICAN CRUISE

The Pan American Medical Association announces a sixteen day combination medical congress and cruise, to be held in several South American cities and aboard ship en route.

The cruise will sail from New York on January 6, 1954, and conferences will be held in Caracas, San Juan, Ciudad Trujillo, St. Thomas and Havana.

ACS SECTIONAL MEETINGS

The American College of Surgeons will hold six sectional meetings between February 1 and May 19, 1954. Outstanding speakers will discuss current surgical problems and procedures.

The meetings will convene at the following cities:

Charlotte, N. C., February 1-3
Reno, Nev., February 25-26
Omaha, Neb., March 1-4
French Lick Springs, Ind., March 15-17
Montreal, Quebec, March 31-April 2
London, England, May 17-19

CHEST PHYSICIANS COURSES

The American College of Chest Physicians announces that it will sponsor two postgraduate courses on diseases of the chest. The first will be held in New Orleans February 15-19, 1954 and the second in Philadelphia, March 15-19, 1954. Tuition for each course is $75.

Further information may be obtained from the Executive Director, 112 East Chestnut Street, Chicago 11, Illinois.

GENERAL PRACTICE ASSEMBLY

The American Academy of General Practice will present its sixth annual scientific assembly March 22-25, 1954 in the Public Auditorium, Cleveland, Ohio. The program will feature symposia on peptic ulcer, tuberculosis, headeaches and vertigo, antibiotics, and other problems of importance to the general practitioner.

STERILITY AWARD

The American Society for the Study of Sterility announces an award of $1000 for an outstanding written contribution on the subject of infertility and sterility. The prize winning essay will be presented at the 1954 meeting of the Society. Articles should be submitted not later than March 1, 1954. Further details may be obtained from the Society, c/o Dr. Herbert H. Thomas, Secretary, 920 South 19 Street, Birmingham, Alabama.

WOMAN'S AUXILIARY

EXECUTIVE BOARD MEETING

Mrs. John J. Muccia, Press and Publicity Chairman

A meeting of the executive board of the Woman's Auxiliary to The Medical Society of New Jersey was called to order by the president, Mrs. Frank S. Forte, on October 13, at the executive offices in Trenton.

Resolutions of sympathy, prepared by Mrs. David B. Allman, were read for Dr. Robert S. Gamon and Mrs. Pascal Baiocchi. A copy of these resolutions will be presented to the families of the deceased.

Among the topics discussed were: membership and programs, public relations and legislation, *Today's Health* and *The Bulletin*, and conducting county meetings.

Guest speakers were Dr. Ethel Alpenfels, Professor of Education, New York University, and Mr. Richard I. Nevin, Executive Officer of The Medical Society of New Jersey.

AUXILIARY REPORTS

Camden County

Mrs. George W. Hager, Jr., Publicity Chairman

The first meeting of the *Woman's Auxiliary to the Camden County Medical Society* for 1953-1954 was held on October 6, at the Haddon Fortnightly, Haddonfield. Mrs. Kenneth L. Athey, president, presided.

Mrs. A.M.K. Maldeis, program chairman, introduced the guest speaker for the afternoon, the Rev. Henry Charlton Beck, widely known clergyman, historian and humorist. Rev. Beck is the author of "Forgotten Towns of New Jersey," "More Forgotten Towns," "Jersey Genesis" and other books.

Cape May County

Mrs. Paul Yingling, Publicity Chairman

Mrs. Carl Records, of Cape May, president, presided at the regular meeting of the *Woman's Auxiliary to the Cape May County Medical Society* on October 20, at the home of Mrs. J. S. D. Eisenhower, Sr., Wildwood.

Reports were given by the chairmen of the various committees. Plans were made for the disbursement of part of the medical society-auxiliary nurses scholarship fund to the Jefferson Hospital School of Nursing for Miss Patricia Toy of Dias Creek.

Mrs. Samuel Mazotta, of Wildwood, reported that she has shown several public health films to several organizations in the county.

Essex County

Mrs. Harry E. DiGiacomo, Chairman, Press and Publicity

At the annual fall luncheon of the *Woman's Auxiliary to the Essex County Medical Society*, Mrs. Frank Forte, state president, announced the formation of a new committee for mental health under the chairmanship of Mrs. Louis Covino. Mrs. Forte also made an appeal for support for the American Medical Education Foundation and read suggestions for raising funds.

Dr. William Hahn, President of the Essex County Medical Society, praised the auxiliary for its provision of nursing scholarships which, he declared, were urgently needed. This year scholarships were provided for five first year students in addition to continued aid to previous recipients.

Dr. Edward Klein, Jr., President of the Academy of Medicine of New Jersey, told of the expansion of his organization and invited the auxiliary to aid in its anniversary program next spring. Mrs. Paul Rauschenbach of Paterson, president-elect of the state auxiliary, also spoke.

Hudson County

Mrs. Mary Dolganos, Publicity Chairman

The *Auxiliary to Hudson County Medical Society* held the first meeting of the fall season in Murdock Hall, Jersey City Medical Center, on October 5. Mrs. William Loori, president, presided.

Two new members were welcomed into the organization, Mrs. Walter Weber of Union City, and Mrs. Jack Crosby of Jersey City.

A very interesting and practical program was given by the Home Economics Department of Public Service. The title was "Menus in Party Dress."

The November meeting of the auxiliary was held on November 2 in Murdock Hall. The Gannon Debating Society of St. Peter's College gave a very interesting discussion on "Resolved, that the Federal Government Should Pass a Compulsory Fair Employment Act." The program was under the direction of Mrs. John J. Di Gioia, legislation chairman.

COUNTY SOCIETY REPORTS

BERGEN

John E. McWhorter, M.D., Reporter

The regular monthly meeting of the *Bergen County Medical Society* was held on the evening of October 13, at Bergen Pines Hospital, Paramus. The meeting was opened by the president, Dr. Winton H. Johnson.

The following applicants were elected to membership: Associate, Drs. Anthony J. Colaneri, Fred E. Eggers, Alexander Fasulo, Andrew J. Gallagher, Loftus Hengeveld, John C. Hoover, Clarence C. LaFortune and Bernard Leung; emeritus, Dr. George W. Finke.

Dr. Johnson announced to the membership that the telephone company will shortly approach the members of the Society regarding the classified telephone directory listings desired by each physician. He discussed the listing as approved by the executive committee and printed in the October bulletin.

The president then discussed with the membership the Bergen Community Blood Bank. A piece of property and building have been contracted for in Paramus. A fund raising campaign will be started in November. This will be the only drive for funds, as once the bank is established it will be self-sustaining. The president urged the members to contribute to this very much needed community service.

Dr. Johnson outlined in brief the program for the coming year as follows:

1. A building for the medical society. On this subject, the president stated that the dental society and pharmaceutical association are both anxious to secure a building to house all three societies.
2. The one hundredth anniversary of the medical society.

Resolution regarding fee schedule and establishment of general practice departments in all county hospitals were presented and passed.

Dr. Felix Vann announced that a series of three articles regarding the Bergen Community Blood Bank would be run in the monthly bulletin, starting with the November issue.

The regular monthly meeting of the *Bergen County Medical Society* was held on November 10, at Bergen Pines Hospital, with the president, Dr. Winton H. Johnson, presiding.

The following applicants were elected to membership: associate, Dr. Barbara E. O'Connell and Dr. Seymour Chasan; regular by transfer, Drs. Hugh Auchincloss and John A. Wood from New York County, Dr. Edward Schnayerson from Queens County.

Dr. Johnson reported on the progress of contributions from the physicians of the county to the Bergen Community Blood Bank. He announced that there is at the present time a Naval Reserve Group for physicians in the county.

The president then introduced Mr. Richard I. Nevin, executive officer of the state society, who spoke briefly on three important meetings to take place: the public relations meeting to discuss medical coverage, a regional conference to discuss medical care and medical services for veterans, and a meeting relating to the medical-dental school.

The president announced that the society's offices are now located at 873 Teaneck Road, Teaneck, and invited all members to visit them.

The speaker of the evening, Dr. Sara M. Jordan, Director of Gastro-Enterology of the Lahey Clinic, Boston, spoke on medical aspects of gastric ulcer.

BURLINGTON

WILLIAM F. BETSCH, M.D., Reporter

A regular meeting of the *Burlington County Medical Society* was held at the Riverton Country Club on October 8. The meeting was called to order by Freeman W. Metzer, M.D., president.

Guest speaker was David Cooper, M.D., ex-president of the American Trudeau Society. His subject was "Newer Trends in the Treatment of Tuberculosis." The discussion was lead by Dr. Marcus W. Newcomb.

Mr. Richard I. Nevin, Executive Officer, briefly outlined a few of the present accomplishments and future plans of the State Society.

The following applications for transfer to our Society were unanimously approved: Dr. Harry P. Kane of the Bronx County Medical Society and Dr. Edward Foord of the New Haven County Medical Society.

GLOUCESTER

Louis K. Collins, M.D., Reporter

The Woodbury Country Club was the setting for the annual social session and Ladies' Night of the *Gloucester County Medical Society,* on October 15. Acting as toastmaster in place of the president, was Chester I. Ulmer, M.D.

Among the guests were State Senator Harold Hannold, Representative Charles A. Wolverton, and members of the county press.

Henry B. Decker, M.D., president of the State Society, discussed the medical school problem in New Jersey.

The speaker of the evening was Dr. Murray Banks, whose topic was, "What to Do Until the Psychiatrist Comes."

HUDSON

Harry T. Aronowitz, M.D., Reporter

The first meeting of the *Hudson County Medical Society* for this season took place on October 6 at Murdoch Hall, Jersey City Medical Center. Dr. Joseph P. Donnelly presided.

Among the communications read was an announcement of a recently organized local chapter of the national Medical Veterans' Society.

A resolution pertaining to the adoption of a minimum fee schedule for physicians' house calls, day and night, was presented by Dr. Chieffo and referred to the executive committee.

The scientific session was highlighted by our guest, Sara M. Jordan, M.D., Director of the Department of Gastroenterology of the Lahey Clinic in Boston, who spoke on functional disease of the digestive tract.

MIDDLESEX

Harold V. Cano, M.D., Reporter

The regular monthly meeting of the *Middlesex County Medical Society,* was held at Roosevelt Hosital, Metuchen, October 31, with Dr. Morris, the president, presiding.

Dr. George J. Schejbal was admitted to regular membership from associate membership.

The recommendation for the change in the By-Laws of the society—changing the annual meeting from December to June was referred to the Board of Trustees for study and report at the November 1953 meeting.

Mr. Richard I. Nevin, executive officer of The Medical Society of New Jersey enumerated several bills concerning the medical profession which had been passed by the state legislature.

Dr. Ralph Colp, Clinical Professor of Surgery, College of Physicians and Surgeons, Columbia University, spoke on surgical problems in peptic ulcer.

MONMOUTH

M. F. Trippe, M.D., Reporter

The regular monthly meeting of the *Monmouth County Medical Society* was held on October 28 at the Monmouth Memorial Hospital, Long Branch. Following the regular business meeting the president, Dr. George McDonnell, introduced the main speaker, Dr. George T. Pack, Attending Surgeon at Memorial Hospital, New York City, who spoke on the subject of the treatment of tumors of the liver. Four of his associates elaborated on the presentation by discussing the treatment of tumors of the lung, stomach, breast, and skin. The other speakers were Drs. James Baldwin, Irving Ariel, Richard Basfield, and Jesse Davis.

UNION

M. L. Griswold, Jr., M.D., Reporter

The annual dinner for the members of the *Union County Medical Society* and their guests, was held at the Chi-Am Chateau in Mountainside, on Wednesday, November 11. The meeting was addressed by Mr. Joseph B. O'Connor. His subject was, "The Department of Health, Education and Welfare," of which he is a regional director, with jurisdiction comprising the states of New York, New Jersey, Pennsylvania and Delaware.

A short business meeting was conducted by the president, Dr. William H. McCallion.

Eleven candidates were elected to full membership in the society. They were: Dr. Arthur N. Avella, Fanwood; Dr. George P. Child, Roselle Park; Dr. Robert B. Francis, Summit; Dr. Alvin Schrager, Westfield; Dr. Frank C. Dresdale, and Dr. Frederick Van Poznak, both of Hillside; Dr. Irwin P. Geleris, Dr. Joseph P. Greely, and Dr. Emil G. Piserchia, all of Elizabeth; Dr. Emil A. Kratzman, Plainfield, in transfer from Blair County, Pa., and Dr. Isador Ripps, Plainfield, from Bronx County, N. Y.

BOOK REVIEWS

Many of the Reviews in this section are prepared in cooperation with the Academy of Medicine of Northern New Jersey

New and Nonofficial Remedies, 1953. By The Council on Pharmacy and Chemistry of The American Medical Association. Pp. 623. Philadelphia, J. B. Lippincott Company, 1953. ($2.65).

The 1953 edition of *New and Nonofficial Remedies* contains material of pharmacologic interest to every practicing physician. It consists of a description of those drugs which have been accepted by the Council, with the exception of those which appear in the U. S. Pharmacopeia or The National Formulary.

The 1953 issue is now published in two parts: Section A—New and Nonofficial Remedies and Section B—Tests and Standards for New and Nonofficial Remedies. These two sections were formerly included in the same volume under the headings Sections A and B.

The first portion of N. N. R. contains the official rules for the admission of articles for inclusion in this book. There are several regulations concerning this question which cover such considerations as commercial availability, the exemption of well known drugs, brand and generic names, evidence for the value of new drugs, etc. Criteria for the evaluation of certain drugs such as antibacterial agents, contraceptives, and other similar preparations are outlined. An important section of the book deals with the naming of new products.

The bulk of this book is concerned with a detailed presentation of the drugs currently approved by the Council. The drugs are grouped according to their therapeutic action starting with agents used in allergy. There is first a general description of the drug in each class, and their therapeutic

and toxic potency. This is followed by a listing of the individual drugs. Each drug is described with the presentation of its chemical structure, physical properties, actions and dosage. Under each major heading the drugs are grouped alphabetically. The generic name is given first, followed by each company's trade name and this in turn is followed by the complete chemical name. It is unnecessary to make any comment on the manner in which each drug is discussed and evaluated. Suffice to say, however, the members of the Council on Pharmacy and Chemistry include physicians and research scientists who are widely known and well experienced in the field of pharmacology. They have been assisted by an imposing list of consultants during the past year.

A few highlights of the book are worthy of note. Particular mention should be made of the statement on page 94, indicating that topical sulfonamides are of no value and are not recommended by the Council. According to the Council mannitol hexanitrate, another widely advertised preparation, is considered to be of little value in the treatment of coronary insufficiency or essential hypertension.

On page 247 there is a valuable table of the barbiturates in which each drug is listed by its chemical name and its duration of action. It is interesting to note that piperoxan hydrochloride is the only agent recommended by the Council for use as a diagnostic test for pheochromocytoma.

A critical evaluation of dehydrocholic acid is given on page 337 stating, "it is rarely beneficial for patients with cholecystitis and cholelithiasis or for chronic partial obstruction of the common duct when surgery is contraindicated or deferred." It can be seen from these few examples that the Council spares no effort in providing a balanced and critical statement concerning the efficacy of each drug.

Of additional interest to the reader is the bibliography of unaccepted products at the end of this book. This index lists the names of preparations which have not been accepted by the Council and refers to the place in the literature (usually *The Journal of the American Medical Association*) where a full report may be found. It is surprising to note that many widely advertised and familiar preparations are included in this bibliography. Among a few which have been chosen at random are the following: Agarol Compound, Allonal-Roche, Amend's Solution, Anusol Suppositories, Auralgan, Nupercainal, Ovoferrin and Taka-Diastase. It is worth while for every physician to look over this list before prescribing a medication which is not found either in U.S.P., N. F., or N.N.R.

R. D. GOODMAN, M.D.

X-ray Diagnosis of Chest Diseases. By Coleman B. Rabin, M.D., Asst. Clinical Professor of Medicine, College of Physicians and Surgeons, Columbia University. Pp. 206. Baltimore, The Williams & Wilkins Co., 1952. ($12.00)

The professional background of the author is reflected in the presentation of the subject matter of this book. Dr. Rabin spent many years in the pathology laboratory studying and checking post-mortem and operative specimens, particularly in their relations to shadows seen by x-ray. He has the advantage of an extensive clinical experience with all types of chest disease. As a result, we have a book which is bolstered by extensive pathologic and clinical experience. Throughout, the interpretation of x-ray findings is presented with a background of clinical manifestations and pathologic changes.

One is impressed by the enthusiasm and value which the author places in the x-ray as a means of accurately diagnosing chest diseases. At the same time the author emphasizes the limitations of relying too much on the x-ray film for diagnosis. The book contains many little "tricks" and "pearls" that the author has discovered and passes along. Particularly is this true when the author speaks of the fluoroscopic examination of the chest. His method of injecting small amounts of colored lipiodol into an interspace for the accurate localization of a lung abscess has proved of great value to the thoracic surgeon.

In Part 1, entitled General Considerations, Dr. Rabin discusses the technics and methods used in chest x-ray diagnosis. In Part 2, General Roentgen Pathology, he describes the x-ray manifestations of single pathologic processes as they affect the lungs. In Part 3, Regional Roentgen Pathology, he describes the x-ray findings in lung diseases. Part 4, Differential Diagnosis of Certain Roentgen Shadows, is a resume and review of the possible interpretations of the shadows seen on x-rays of the chest.

The text is liberally illustrated with x-ray reproductions whose interpretations were supported by operative and laboratory follow-up.

HENRY A. BRODKIN, M.D.

Cure Your Nerves Yourself. By Louis Bisch, M.D. Pp. 247. New York, Wilfred Funk, Inc., 1953. ($3.50)

"If you think you need psychiatric advice, don't rush to the psychiatrist until you are sure you cannot help yourself." That's what Dr. Bisch says here. Right on page 6. To drive home the point, he adds: "It is highly probable that you can learn to solve the vast majority of your nerve and mind problems by yourself." The primary purpose of this book is listed as "to show you how you can cure yourself."

The method of achieving this proper personality balance is outlined as follows: (1) Direct attention away from yourself; (2) don't overwork the imagination; (3) develop self confidence; (4) don't be too kind, too soft, too sentimental or too forgiving; (5) rid yourself of childish habit patterns; (sounds easy, doesn't it?—H.A.D.): (6) be understanding of others; (7) don't droop or slump; stand, walk and sit erect. Those whose personality is on the plus side look you straight in the eye; (8) observe how others act; (9) make your habits express your true self; (10) guard your health; (11) always be willing to change.

"A person who has never entertained the idea of self-destruction is more likely to take his own life than one who keeps thinking he will." So

says Dr. Bisch. This is dangerous advice for the family of a depressed patient.

The major cause for psychoneurosis, says Dr. Bisch, is "lack of knowledge. But there is nothing hidden about nerves that cannot be understood. It is exactly this know-how that I wish to teach you. The rest—your own cure—is relatively simple."

Somewhat bewilderingly (after the advice on avoiding a psychiatrist) the author says: "If you do suffer from a neurosis or psychosis, all you have to do is consult a competent psychiatrist. He can cure you." (This is a dirty trick to play on the profession. If a reader of this book is not cured of his homosexuality or schizophrenia, he assumes the therapist was not competent!) Never unwilling to make dogmatic statements, Dr. Bisch writes: "Psychoanalysis is the best method to cure neuroses. And all can be cured."

Is it necessary to carry this review further? *Res ipsa loquitur.*

Henry A. Davidson, M.D.

Doctor in the House. By Gordon Ostlere, M.D. (Richard Gordon, pseud.) Pp. 186. New York, Harcourt, Brace and Co., Inc., 1953. ($2.75)

This is an amusing, nostalgic account of the life, labors, and loves of an English medical student in one of London's hospitals. The author describes humorously his struggles with his studies, his trials with some of his teachers, escapades with fellow students, flirtations with nurses, clinical trial and error with the help of patients, and drinking bouts at a pub. Some real entertainment is in store for the reader. Dr. Ostlere tells about a candidate for licensure who was provided with a life-size papier-mâché model of half the female trunk into which a straw-stuffed baby was slipped through a trap door. The candidate was given a pair of obstetrical forceps and required to deliver the doll. This particular candidate applied the approved grip but the straw fetus refused to be born. He saw his chances of passing fading "like a spent match." He gave a desperate heave. His feet slipped on the polished floor and over his head flew mother, baby, forceps, and all. The examiner looked at him lying on the floor for a second in silence. Then he picked up one blade of the forceps and handed it to him. "Now hit the father with that," he said sourly, "and you'll have killed the whole bloody family." There is much more in a similar vein. This book can provide several hours of light and enjoyable reading.

Harold M. Goettel

Fool's Haven. By C. C. Cawley. Pp. 210. Boston, House of Edinboro, 1953. ($2.75)

Mr. Cawley is a man with a mission. His mission is to denounce the state of the law which permits preachers of faith healing to escape liability for deaths due to lack of medical attention. The thesis is an interesting one and would make a thought-provoking mazazine article. Mr. Cawley has inflated it to the dimensions of a 200-page book by setting it in the form of a novel. The novel is a pedestrian account of the daily life of a college student, his courtship of a girl, and her death from a ruptured appendix because of her mother's preference for prayer over surgical attention. The reader grows a little weary of reading about the color of trolley cars in Pasadena, the kind of ice cream ordered by the courting couple and the jejune conversation of students on the make. There is also a strange character called Marty who is six times found to be stark naked, his face luxuriously lathered. The hero walks into Marty that many times and always in that posture. This reviewer, being no psychiatrist, does not know why Marty is always in a lather, but the author is patently obsessed with this phenomenon.

A person who does not believe in faith healing does not need this tract. One who does believe in it will hardly be converted to science and reason. Still, Mr. Cawley should rate an "E" for effort.

Victor Huberman, M.D.

May's Manual of Diseases of the Eye. Twenty-first edition revised and edited by Charles A. Perera, M.D., Associate Clinical Professor, College of Physicians and Surgeons, Columbia University. Pp. 512. Baltimore, Williams and Wilkins Co., 1953. ($6.00)

In his preface to the twenty-first edition of this familiar and time-honored manual, the editor states that he has resisted the temptation to include details which would be of value only to the specialist. It is perhaps because of this desire to preserve the original form and intention of Dr. May's text, that this work is beginning to show the effects of time. It is probable that much of the original material has been preserved intact from the first edition of 1900. There are only superficial changes apparent between this edition and the fourteenth, which was published in 1934.

The simple format and clear presentation of the book have made it a universal favorite with medical students and medical practitioners in general, as part of the physician's library. It has been translated into Spanish, French, Italian, Dutch, German, Japanese, Chinese, Portugese, and Urdu. Its popularity and wide distribution make one wish that the editor had done away with some of the obsolete material, and emphasized in more detail some of the great advances that have been made in ophthalmology during the past fifty years. New material in this edition includes mention of the use of cortisone and antibiotics in therapy, retrolental fibroplasia in diagnosis, and Kronlein's operation and scleral resection in surgery.

One greets a new edition of *May's Manual* as a familiar old friend, whose appearance changes very little as the years go by. As long as it fills the definite need for a good eye manual, it will continue to appear on medical book shelves. A thorough revision to bring this work up-to-date appears to be in order.

Jonathan L. Harris, M.D.

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INDEX---1953

HOW TO USE THIS INDEX

This is a single alphabetical index. When searching for an original article, look under the first significant word in the title. Authors are also listed alphabetically, with an asterisk (*) to indicate if reference is to an original article. Editorials are indexed by first significant word of title or by subject; book reviews by title or subject but not by author. City of residence is indicated for authors of original articles.

If you do not bind your JOURNALS, use the table of pages (below) to find the month of issue to which any page citation refers.

The Transactions of the Annual Meeting appear as a supplement to the August issue.

The annual reports of the committees and officers of the Society are indexed on page 187 of the May JOURNAL.

KEY TO SYMBOLS

January	1 to 40	September	363 to 442
February	41 to 86	October	443 to 486
March	87 to 126	November	487 to 534
April	127 to 166	December	535 to 584
May	167 to 238		
June	239 to 286		
July	287 to 324	Annual Reports	May JOURNAL
August	325 to 362	Transactions	August Supplement

TABLE OF PAGES

* Original Articles
† Obituary
e—Editorial
br—Book Review
ab—Abstract

A

Abraham, Albert, Morristown *60, *558
ACTH in Sickle Cell Anemia—Bisgeier *24
ACTH, Intravenous, Prolonged Home Control of Intractable Asthma—Swern and Cagan *98
Addison's Disease, Test for ab298
Aeroplast Dressings ab349
Aged, Blood Pressure in e536
Alexander, Walter G.† 158
Allergic Conditions, Piromen in—Aronoff and Ghaemi *564
Allergic Disorders, Double Calcium and Phosphate Salt in—Kurtz *308
Allman, David B., Atlantic City *382
Anemia, Sickle Cell, Reticulocytosis Following ACTH in—Bisgeier *24
Anesthesia, Intravenous, in Obstetrics and Gynecology ab461
Anesthesia, Succinylcholine in ab49
Anniversary Issue e3, e363
Announcements 317, 357, 438, 477, 524, 569
Annual Meeting 187th—
  Call e128
  Official Attendance 315
  Program 170
Annual Reports May JOURNAL
  —Index 187

Antibiotic, Post-, Infection ab549
Antihistamine, Prophylactic Use of, in Blood Transfusions—Bernhard, Grubin and Bryan *542
Antonius, Nicholas A., Newark *62, *490
Aronoff, Solomon, Jersey City *564
Arthritis, Butazolidin in the Treatment of—Strazza and Ressetar *333
Arthritis Therapy, Evaluation of Newer Products in—Gray and Merrick *456
Asthma in the First Year of Life—Buffum *503
Asthma, Intractable, Prolonged Home Control of, by Intravenous ACTH—Swern and Cagan *98
Athletic Injuries, Prevention of, in High School—Novich *350
Atlantic County Medical Society 80, 118, 160, 220, 278, 481, 527
Atomic Defense, The Physician in (T. P. Sears) br530
Atwell, David R.† 276
Aural Rehabilitation Centers e535
Auricular Flutter and Flutter-Fibrillation Associated with Intraventricular Block to Resemble Paroxysmal Ventricular Tachycardia—Chieffo and Garibaldi *299
Autonomic Nervous System Surgery ab25

B

Back Down the Ridge (W. L. White) br284
Bacteroides Infections ab67
Baker, Augustus L., Sr.† 79
Baldness, Premature—Shapiro *17
Barmak, Samuel, Pinewald *248
Bass, Rose D.† 356
Baum, Lewis F., South Orange *91
Baum, Otto S., South Orange *91
BCG Vaccination (Edwards, Palmer and Magnus) br484
Becker, Marvin C., Newark *462
Bergen County Medical Society 34, 80, 118, 221, 481, 527, 571
Bergsma, Daniel, Trenton *417
Beriberi Heart Disease—Becker, Yaguda and Tyrrell *462
Bernhard, William G., Newark *542
Beyer, William† 479
Biochemistry of Disease (Bodansky and Bodansky) br321
Bisgeier, George P., East Orange *24
Black-Stevenson Memorial Clinic 278
Bland, John H., Burlington, Vt. *256
Blood Pressure in the Aged e536
Blood, Standard Values in (edited by E. C. Albritton) br283
Bluestein, Sanfurd G., Paterson *106
Book Reviews 36, 83, 123, 163, 236, 283, 321, 360, 439, 482, 530, 572
(Listed alphabetically by title in general index and marked br)
Bowers, F. Clyde, Mendham *60
Breast, X-ray of ab342
Brodkin, Henry A., Newark *135, *394
Bronner, Alfred, Passaic *68
Bryan, Mary Virginia, R.N., Newark *542
Buffum, William P., Providence, R. I. *503
Bullen, Victor E., Sr.† 479
Bunnell, Frederick N.† 276
Burlington County Medical Society 34, 81, 160, 221, 278, 528, 571
Burritt, Norman W.† 32
Busicco, Philip S.† 479
Butazolidin in the Treatment of Arthritis—Strazza and Ressetar *333

C

Cagan, R. N., Trenton *98
Camden County Medical Society 34, 118, 160, 222, 278, 319, 528
Cancer Detection, The Public Health Aspects of Cytology in—Miller, Moog and Lee *20
Carbohydrate Disturbances in Liver Disease—Leevy, O'Connell and White *44
Carcinoma (See organ affected)
Cardiac Therapy (H. J. Stewart) br163
Cardiovascular Surgery at St. Michael's Hospital—Crecca, McGuire and Antonius *62
Carotid Sinus Syndrome—Rogers *473
Castaldo, Neil, Cranford *148
Cataracts, Non-surgical Treatment of ab16
Cecal Deformity, Benign Causes of—Ellenbogen, Johnson, Molitch and Erber *290
Cerebral Palsy, Ataxic, with Akinetic Seizures—Keats *53
Challenges, Ten e4
Chesner, William A.† 479
Chieffo, Henry D., Jersey City *299
Children, The Treatment of Chronic Pharyngeal Infection and Postnasal Drip in—Dintenfass *5
Chloride Test in Drownings and Death due to Other Causes—Kamen *346
Chlor-Trimeton Maleate in Prevention of Transfusion Reactions—Offenkrantz, Margolin and Jackson *253
Christmas Message e535
Chromate Producing Industry, Health of Workers in br360
Chronic Illness, Prevention of, Governor's Conference on 78
Circulatory System, Disorders of (edited by R. L. Craig) br124
Clark, Ernest W.† 318
Clinical Allergy, A Manual of (Sheldon, Lovel and Mathews) br322
Cohen, Herman N.† 276
Commissurotomy, Mitral, Selection of Cases for—Antonius, Miller, Green and Crecca *490
Committee Chairmen, List of (Advertising page 3A January, February, March, April and December JOURNALS)

Committees, List of (Advertising page 4A May and September Journals)
Compensation Insurance, Abuse of (It's Nice Money if You Can Get it)—Demy *55
Congenital Anomalies of the Heart and Great Vessels (M. A. Schnitker) br84
Connolly, Richard N.† 276
Constitutional Amendment, Proposed 76
Cook, Hugh F.† 32
Cornell Conferences on Therapy, Vol. 6 (edited by H. Gold) br531
Correlative Neuro-Anatomy and Functional Neurology (McDonald and Chusid) br38
Cortisone in the Treatment of Radiation Pneumonitis—Bluestein and Roemer *106
Cortisone—Perforated Gastric Ulcer During Therapy for Rheumatoid Arthritis—Kerdasha *343
Cortone, A Handbook of Therapy (Merck & Co.) br37
County Medical Societies, List of Officers (Advertising page 7A May Journal)
Cox, Harold C.† 158
Crane, Bernard† 276
Crecca, Anthony D., Newark *62, *490
Criminology, Preventive e489
Culdoscopy; A New Technic in Gynecologic and Obstetric Diagnosis (A. Decker) br123
Cumberland County Medical Society 34, 118, 222, 279, 319, 528
Cummins, Ella, Morristown *558
Cure Your Nerves Yourself (L. Bisch) br573
Current Concepts of Rheumatic Fever Prevention—Drezner *538
Curry, Marcus A.† 32
Cutler, Milton, Hammonton *510
Cutler, Paul, Hammonton *510
Cytology in Cancer Detection, The Public Health Aspects of—Miller, Moog and Lee *20

D

D'Amato, Charles R.† 356
Danzis, Max† e488, 525
Davidson, Henry A., Arlington, Va. e366, *368
—Resigns as Editor e287
Death, Sudden, in Infancy—Nevius *242
Decker, Henry B. e239, e535
Degrees, Medical, in New Jersey—Rogers *496
Demy, Nicholas G., Plainfield *55
Dennison, A. D., Jr., Indianapolis, Indiana *520
Dental Infection Causing Dermatosis—Hanfling and Knopf *153
Dentifrice Abrasives ab52
Dermatology—Essentials of Diagnosis and Treatment (Sulzberger and Wolf) br283
Dermatology, Practical, for Medical Students and General Practitioners (G. M. Lewis) br164
Dermatosis, Generalized, Caused by Dental Infection—Hanfling and Knopf *153
Dextran in Shock ab514
Diabetes Detection Drive e443
Diabetes with Pregnancy ab10
Diamox, A New Oral Diuretic ab557
Diaphragmatic Hernia Complicating Pregnancy—Levy *72
D'Imperio, Francesco, Camden *265
Dintenfass, Arthur, Atlantic City *5
Disease, The Conception of (W. Riese) br322
Diuretic, Diamox, A New Oral ab557
Divorce, Children of (L. L. Despert) br484
Doctor in the House (G. Ostlere) br574
Dodd, Mrs. William E., Beach Haven *430
Double Calcium and Phospate Salt in Allergic Disorders—Kurtz *308
Dramamine Response in Ataxic Cerebral Palsy with Akinetic Seizures—Keats *53
Drezner, Henry L., Trenton *538
Drownings, Chloride Test in—Kamen *346
Duffy, Edward P., Jr., Belleville *26
Dynamic Psychiatry: Frustrated Women (L. S. London) br38

E

Ear, Nose and Throat Cancer e3
Eaton, Arthur T.† 276
Editorial, Guest—Willan e88
Editors, Roll Call of *368
Electrocardiography, Clinical, in Children (G. H. B. Nicolson) br531
Electrocardiography in Practice (Graybiel *et al.*) br284
Electrocardiography: Its Value and Limitations—Marshall *550
Ellenbogen, L. S., Atlantic City *290
Elmer, Matthew K.† 479
Endocarditis, Subacute Bacterial, in Middle and Later Life—Sobol *108
Endocrine Treatment in General Practice (edited by Goldzieher and Goldzieher) br123
Erber, L., Atlantic City *290
Essex County Medical Society 223
Eye, Surgery of the (Wiener and Scheie) br84

F

Fee Splitting, Judicial Council on 74
Feman, J. George† 356
Fernicola, Anthony R., Newark *515
Fiftieth Anniversary Issue e363
Fifty, Fictitious e3
First by Whom the New is Tried e289
Flanagan, Curtis J., Jersey City *500
Fleming, Charles L.† 525
Flitcroft, William† 276
Fool's Haven (C. C. Cawley) br574
Ford, Ralph A., Belleville *11
Forensic Psychiatry (H. A. Davidson) br321
Fortunato, Joseph F.† 79
Foster, Herbert W.† 480
Fuhrmann, Barclay S.† 79

G

Gamon, Robert S.† 318
Garibaldi, Louis J., Jersey City *299
Gastrointestinal Diseases, Prantal in—D'Imperio *265

* Original article
† Obituary
ab—Abstract
e—Editorial
br—Book review
Annual Reports: May Journal
Transactions: August Supplement

Gerendasy, Julius, Elizabeth *386
Geriatric Therapy, Metrazol in—Smigel, Serhus and Barmak *248
Ghaemi, Abolghassem, Teheran, Iran *564
Gibb, Alice S.† 480
Glaucomato-Cyclitic Crises—Harris *453
Glaucomatous Optic Atrophy Complicated by Syphilis—Raymond *304
Gloucester County Medical Society 34, 81, 119, 160, 224, 279, 319, 481, 571
Goodman, Rowland D., 2d, Trenton *405
Gordon, J. Berkeley, Marlboro *101
Gout, Advances in the Treatment of—Warter *328
Gray, John W., Newark *456
Greco, R. A., Belleville *11
Green, Henry, Newark *490
Grubin, Harold, Newark *542
Gynecology, Surgical (J. P. Greenhill) br164

H

Haddon Hall Highlights 313
Handicapped, Employing the e444
Hanfling, Seymour L., East Orange *153
Harris, Jonathan L., Newark *453
Hawkins, G. Kenneth, Bloomfield *11
Headache Problem—Smith *138
Heart, Evaluation of Functional Murmurs in Children—Kearney *50
Heart, Human, Anatomy of the Veins of, with Special Reference to Normal Anastomotic Channels—Parsonnet *446
Heat Therapy e326
Hemarthrosis, Hyaluronidase in ab252
Hemorrhage, Subperitoneal ab545
Hepatic Hypoglycemia e43
Hepatitis Acute, B_{12} in ab452
Hiatus Hernia—Baum and Baum *91
High School, Prevention of Athletic Injuries in—Novich *350
Hodgkin's Disease in a Negro Boy—Bowers and Abraham *60
Hospital Care, The Cost of e325
Hudson County Medical Society 119, 225, 319, 481, 571
Hunterdon County Medical Society 35, 119, 226
Hyaluronidase in Hemarthrosis ab252
Hypertension, Low Sodium Diet in—Ornstein and Lercher *294
Hypoglycemia, Hepatic e43

I

Iatrogenic Meningitis—Cutler and Cutler *510
Idiopathic Hemorrhagic Infarction of the Testis in the Newborn—Fernicola *515
Ill Award to Dr. Henry B. Orton 355
In Memoriam e487
Infancy, Sudden Death in—Nevius *242
Infarction, Idiopathic, of the Testis in the Newborn—Fernicola *515
Infarction of the Liver due to Polyarteritis Nodosa—Price and Flanagan *500
Injury, Reaction to, Vol. II (W. D. Forbus) br439
Internal Medicine, Advances in, V (edited by Dock and Snapper) br236
Isoniazid in the Treatment of Tuberculosis—Sabety, Greco, Ford and Hawkins *11
It's Nice Money if You Can Get it—Demy *55

J

Jackson, Dorothy, B. S., Paterson *253
Jaffin, Abraham E.† 32
Jedel, Meyer† 276
Johnsen, Sigurd, Heads National Society 567
Johnson, V. E., Atlantic City *290
JOURNAL, Ours is a Comfortable—Davidson e366
Judicial Council on Fee Splitting 74
Judicial Councilors, List of (Advertising page 3A each issue of THE JOURNAL)

K

Kamen, George F., Westfield *346
Kearney, Paul A., Newark *50
Keats, Sidney, Newark *53
Kerdasha, Richard, Vineland *343
Kessler, Henry H., Newark *423
Knopf, Samuel N., D.D.S., Brooklyn, N. Y. *153
Kramer, Bernard M., Perth Amboy *468
Kramer, Samuel E., Perth Amboy *468
Kummel, Max† 480
Kurtz, Gerald I., Paterson *308

L

Laboratory Methods, Clinical Diagnosis by (Todd, Sanford and Wells) br532
Laryngeal Granuloma ab467
Lathrope, George H., Morristown *377
Lead Excretion, Enhancement of ab559
Lee, Frederick P., Paterson *20
Leevy, Carroll M., Jersey City *44
Leff, William, Newark *149
Legislation, Subcommittee on 113, 311
Lercher, Lawrence, New York, N. Y. *294
Letters to a Doctor's Secretary (A. D. Hunt) br484
Letters to THE JOURNAL 274, 316, 526
Levy, Herman, Passaic *72
Libien, Benjamin H., Salem *553
Liva, Arcangelo† 480
Liver Disease, Carbohydrate Disturbances in—Leevy, O'Connell and White *44
Liver, Infarction of, due to Polyarteritis Nodosa—Price and Flanagan *500
Londrigan, Joseph F.† e488, 525
Low Sodium Diet, Palatable, in Hypertension—Ornstein and Lercher *294
Lung Nodules, Solitary e131
Lurie, Solomon I.† 480

M

Madara, John S., Salem *553
Malattia Sclerodermia, La (G. Bassi) br37
Manic-Depressive Psychosis, A Study in (A. Stenstedt) br163

Margolin, Solomon, Ph.D., Paterson *253
Marshall, Frank A., Weehawken *550
Maternal Welfare, Advances in, 1903-1953—Shipps *391
Mauriello, Dominic A., Jersey City *305
May's Manual of Diseases of the Eye (edited by C. A. Perara) br574
McGuire, John J., Newark *62
McKean, Robert, First President of The Medical Society of New Jersey—Rogers *432
Medical Care, Trends in: Medical Service Plans in New Jersey—Sprague *371
Medical Degrees in New Jersey—Rogers *496
Medical Practice Subcommittee 113
Medical Research Committee 156
Medical Service Plans in New Jersey—Sprague *371
Medical Society of New Jersey—Its First Quarter Century—Rogers *132
Medical-Surgical Plan of New Jersey 33, 77, 116, 159, 568
Medicine, A Half Century of—Lathrope *377
Medicine and Surgery, Advances in (Univ. of Penna.) br38
Membership Directory, 1953 75
Meningeal Tumors, Spinal Fluid Sugar in ab61
Meningitis, Iatrogenic—Cutler and Cutler *510
Mental Disorder, Treatment of (L. Alexander) br482
Mental Hospitals, Steps Forward in (edited by D. Blain) br530
Mercer County Medical Society 226
Merrick, Evelyn Z., Newark *456
Metabolic Consequences of Trauma—Bland *256
Metabolism, Disease of (edited by G. G. Duncan) br84
Metrazol—Its Place in Geriatric Therapy—Smigel, Serhus and Barmak *248
Middlesex County Medical Society 35, 81, 160, 229, 279, 572
Military Role of New Jersey Physicians in the Past Fifty Years—Brodkin *394
Miller, Howard B., Fairlawn *20
Miller, Ralph, Newark *490
Mills, Clifford W.† 79
Mitral Stenosis—Commissurotomy, Selection of Cases for—Antonius, Miller, Green and Crecca *490
Molitch, M., Atlantic City *290
Monmouth County Medical Society 161, 230, 279, 358, 572
Mononucleosis, Infectious (S. Leibowitz) br236
Moog, Charles R., Glen Rock *20
Morgan, Browne† 356
Morris County Medical Society 35, 120, 161, 279, 358, 528
Morris, Watson B. 356
Mother's Milk Bank of Essex County—Murray *401
Murmurs, Functional, Evaluation of, in Children—Kearney *50
Murray, Harrold A. e1, e41, e87, e127, e167, *401
Myocardial Disease, Primary ab514
Myocardial Infarction, Acute, Without Pain—Stein *95
Myocardial Infarction, Quinidine in ab273

N

Nalline, Uses of ab332
Neohydrin, an Oral Mercurial Diuretic, Experiences with—Mauriello and Re *305
Neohydrin, the Oral Mercurial, Clinical Investigation of—Leff and Nussbaum *149
Nephritic Edema ab559
Nervous System, The (Atlas) (Kaplan, Von Bonin, Kuntz and Netter) br440
Nevin, Richard I., Trenton *370
Nevius, William B., East Orange *242, 509
New and Nonofficial Remedies, 1953 br572
New Jersey Dermatological Society 280
New Jersey Gastroenterological Society, History of—Gerendasy *386
New Jersey Neuropsychiatric Association 114
New Jersey Ophthalmological Society 81
New Jersey Orthopaedic Society 528
New Jersey Poet Laureate e241
New Jersey, The Medical Society of, Its First Quarter Century—Rogers *132
New Jersey's Premarital Law 541
New Year, The e2
Newman, Abraham J.† 318
Next Case will be Presented by e327
Nodules, Solitary, of the Lung e131
Nonreaginic Food-Allergy, Familial (A. F. Coca) br531
Novich, Max M., Newark *350
Nussbaum, Harvey E., Newark *149
Nutrition and Diet in Health and Disease—(J. S. McLester) br164

O

Obituaries 32, 79, 158, 276, 318, 356, 479, 525
Obstetrics and Gynecology, Intravenous Anesthesia in ab461
Obstetrics, Trilene in—Madara and Libien *553
Obstructive Vascular Disease, Physiologic Therapy for (I. Starr) br283
O'Connell, William, Jersey City *44
O'Crowley, C. R., Newark *427
Ocular Diseases, Office Management of (W. F. Hughes) br236
Offenkrantz, Frederick M., Paterson *253
Officers, List of (Advertising page 3A each issue of The Journal)
Operating Room Technic br123
Ophthalmic Pathology (Friedenwald, *et al.*) br482
Ophthalmic Plastic Surgery (S. A. Fox) br37
Ophthalmology and Otolaryngology, Progress in (edited by Wiener, *et al.*) br322
Ophthalmology, Gifford's Textbook of (F. H. Adler) br360
Organic Diseases Simulating Psychogenic Disorders—Dennison *520
Ornstein, George G., New York, N. Y. *294
Orton, Henry B., Newark *404
—Receives Ill Award 355
Otolaryngology, Changes in, in the Past Fifty Years—Orton *404
Overton, Frank† e487

* Original article
† Obituary
ab—Abstract
e—Editorial

br—Book review
Annual Reports: May Journal
Transactions: August Supplement

P

Pancreatitis, Sphincterotomy for ab354
Paroxysmal Ventricular Tachycardia, Auricular Flutter and Flutter-Fibrillation Associated with Intraventricular Block Resembling—Chieffo and Garibaldi *299
Parsonnet, Victor, Newark *446
Passaic County Medical Society 35, 120, 161, 232, 280, 319, 358
Pediatrics—Advances in, Vol. V (edited by S. Z. Levine) br482
Pediatrics, Asthma in the First Year of Life—Buffum *503
Peripheral Vascular Society e536
Pharmacology, Fifty Years of—Goodman *405
Pharyngeal Infection, Chronic, and Postnasal Drip in Children, Treatment of—Dintenfass *5
Phillips, Claude B.† 525
Photographer, State Society e445
Physically Handicapped, New Jersey Service to—Brodkin *134
Physician Distribution e89
Physicians Handbook (Krupp *et al.*) br38
Piromen in Allergic Conditions—Aronoff and Ghaemi *564
Plaque, Your 156
Pneumonitis, Radiation, Treatment of, with Cortisone—Bluestein and Roemer *106
Poet Laureate of New Jersey e241
Poisoning; A Guide to Clinical Diagnosis and Treatment (W. F. von Oettingen) br284
Polyarteritis Nodosa, Infarction of the Liver due to—Price and Flanagan *500
Postoperative Urinary Suppression: Newer Concepts of Cause and Treatment—Kramer and Kramer *468
Prantal Methylsulfate in Gastrointestinal Diseases—D'Imperio *265
Pregnancy Complicated by Diaphragmatic Hernia—Levy *72
Pregnancy, Diabetes with ab10
Pregnancy, Skin Eruptions of—Satulsky ... *560
Pregnancy Tests, Stigmonene ab303
Premarital Law, New Jersey, New 541
President, Our New e239
President's Message (Murray) ... e1, e41, e87, e127, e167
Preventive Criminology e489
Price, H. Preston, Jersey City *500
Primary Myocardial Disease ab514
Prophylactic Use of an Antihistamine in Blood Transfusions—Bernhard, Grubin and Bryan *542
Psychiatric Diagnosis, Current Problems in (Hoch and Zubin) br440
Psychiatric Hospitals, Problems of—Gordon .. *101
Psychiatric Progress, New Jersey's Contribution to—Stevenson *412
Psychiatry, Forensic (H. A. Davidson) br321
Psychogenic Disorders, Organic Diseases Simulating—Dennison *520
Psychotherapy, Office (L. G. Moench) br83
Psychotherapy, The Nature of—Bronner *68
Public Health, Fifty Years of Progress in—Bergsma *417
Public Health News for the Physician 78, 117, 277, 318, 479
Public Health Subcommittee 113, 312
Public Relations—A New Old Concept—Nevin *370
Public Relations Subcommittee 113, 312
Public Speaking for the Professions and Clubs (S. Kahn) br36
Puerperal Rectal Surgery—Zager *546

Q

Quinidine in Myocardial Infarction ab273

R

Raymond, Louis F., East Orange *304
Re, Maurice, Jersey City *305
Reactions, Transfusion, Prevention of by Chlor-Trimeton Maleate—Offenkrantz, Margolin and Jackson *253
Rectal Surgery, Puerperal—Zager *546
Rehabilitation in New Jersey—Kessler *423
Research, Medical, in New Jersey e130
Ressetar, Michael, Passaic *333
Rheumatic Fever Prevention, Current Concepts of—Drezner *538
Rheumatic Fever, Prevention of 277, e288
Robertson, Beridge† 480
Roemer, Jacob, Paterson *106
Rogers, Fred B., Trenton *132, *432, *496
Rogers, John G., Riverton *473
Rubin, Henry S.† 79
Runnells, John E., Testimonial to 76

S

Sabety, A. M., East Orange *11
Salem County Medical Society 161, 233, 280
Salmonellosis 78
Satulsky, Emanuel M., Elizabeth *560
Schizophrenia, Contributions to the Etiology, Therapy and Prophylaxis of (J. Steinfeld) br360
Schmidt, Walter W.† 356
School Health Examinations, Better—Castaldo *148
Science, American, in Danger e240
Scientific Sections Officers, List of (Advertising page 3A May and September JOURNALS)
Season's Greetings e537
Serhus, Lawrence N., Pinewald *248
Sex Research, Twenty-Five Years of (Aberle and Corner) br531
Shapiro, Irving, Newark *17
Shipps, Hammell P., Camden *391
Shock, Dextran in ab514
Skillman Neuro-Psychiatric Institute 315
Skin Eruptions of Pregnancy—Satulsky *560
Smigel, Joseph O., Pinewald *248
Smith, Henry G.† 480
Smith, Sydney F., Highland Park *138
Sobol, Herman, Newark *108
Somerset County Medical Society 528
Speech Handicapped Children—Duffy *26
Sphincterotomy for Pancreatitis ab354

Splenic Flexure Syndrome ab293
Sprague, Edward W., Newark *371
Stein, William, New Brunswick *95
Sterility: Its Cause and Its Treatment (J. J. Rommer) br37
Stevenson, George S., New York City *412
Stigmonene Pregnancy Tests ab303
Strazza, John A., Jr., Bloomfield *333
Stuttering, Treatment of e42
Subacute Bacterial Endocarditis in Middle and Later Life—Sobol *108
Subperitoneal Hemorrhage ab545
Succinylcholine in Anesthesia ab49
Supplement to THE JOURNAL—Transactions August
Surgery, Autonomic Nervous System ab25
Surgery, Cardiovascular, at St. Michael's Hospital—Crecca, McGuire and Antonius *62
Surgical Progress, Fifty Years of—Allman *382
Swern, Nathan, Trenton *98
Synovial Fluid Changes in Joint Disease (Ropes and Bauer) br483
Syphilis Complicating Glaucomatous Optic Atrophy—Raymond *304
Syphilis, Endemic, Epidemiology and Control of (E. I. Grin) br532

T

Testis, Idiopathic Infarction of, in the Newborn—Fernicola *515
Therapy, Current, 1953 (edited by H. F. Conn) br440
Toxemia, Induction of Labor in ab59
Transfusion Reactions, Chlor-Trimeton Maleate in—Offenkrantz, Margolin and Jackson *253
Transfusions, Prophylactic Use of Antihistamine in—Bernhard, Grubin and Bryan *542
Trauma, Metabolic Consequences of—Bland *256
Treatment, Modern: A Guide for General Practice (edited by Smith and Wermer) br439
Trilene in Obstetrics—Madara and Libien *553
Trustees, Board of—
Election of Chairman and Secretary 478
List of (Advertising page 3A each issue of THE JOURNAL)
Meetings:
November 2, 1952 112
January 4, 1953 112
April 12, 1953 311
May 17, 1953 478
May 20, 1953 478
Tuberculosis Abstracts 39, 85, 125, 165, 237, 285, 323, 361, 441, 485, 533, 583
Tuberculosis, Isoniazid in the Treatment of—Sabety, Greco, Ford and Hawkins *11
Typhoid Fever in Suburban New Jersey—Abraham and Cummins *558
Tyrrell, Eugene J., Newark *462

U

Ulcer, Gastric, Perforated, During Cortisone Therapy for Rheumatoid Arthritis—Kerdasha *343
Union County Medical Society 120, 234, 280, 528, 572
Urinary Suppression, Postoperative—Kramer and Kramer *468
Urologic Disease, Mechanisms of (D. M. Davis) br532
Urology, Fifty Years of—O'Crowley *427

V

Veins of the Human Heart, Anatomy of, with Special Reference to Normal Anastomotic Channels — Parsonnet *446
Venereal Disease, Changes in Penicillin Treatment Program 318
Vision (Vol. 2 of Physiology of the Eye) (A. Linksz) br124

W

Walton, Gordon G.† 480
Warter, Peter J., Trenton *328
Wegrocki, Adolph† 525
Wetterberg, Louis F.† 158
White, Thomas J., Jersey City *44
Williams, William C.† 79
Williams, William Carlos e241
Wolfe, Jacob S.† 318
Woman's Auxiliary—
American Medical Education Foundation 529
Atlantic County 82, 281, 320
Bergen County 162
Camden County 121, 281, 570
Cape May County 36, 122, 282, 530, 570
Carlander, Mrs. Oswald R. 529
Convention Notes 359
Cumberland County 36, 122, 282
Dyer, Mrs. Edward H. 121
Essex County 83, 122, 162, 282, 320, 530, 570
Executive Board Meetings 82, 162, 570
Forte, Mrs. Frank S., President 1953-54 281, 320
Hudson County 83, 163, 282, 321, 570
Inaugural Address—Forte 320
President's Message (Dyer) 121
Somerset County 282
Today's Health 121
Union County 282
Your Help is Needed 529
Woman's Auxiliary to The Medical Society of New Jersey, A History of—Dodd *430
Workmen's Compensation Law e129
World Medical Association Meeting 356

X

X-ray Diagnosis of Chest Diseases (C. B. Rabin) br573

Y

Yaguda, Asher, Newark *462

Z

Zager, Saul, East Orange *546

* Original article
† Obituary
ab— Abstract
e— Editorial

br—Book review
Annual Reports: May JOURNAL
Transactions: August Supplement

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Vol. XXVI December, 1953 No. 12

VIABILITY OF TUBERCLE BACILLI IN VIVO WITH AND WITHOUT CHEMOTHERAPY

By Rene J. Dubos, Ph.D., The American Review of Tuberculosis, June, 1953.

The fact is now clear that, despite the availability of several types of drugs highly effective against tubercle bacilli *in vivo*, it is very difficult, if not impossible, to eradicate infection from human patients, even by prolonged chemotherapy. In contrast is the other fact, long known to pathologists, that bacilli tend to disappear spontaneously and without any form of therapy from certain types of lesions, in particular from cold abscesses and from closed caseous areas. This is well confirmed by the recent observation that it is at times difficult to recover living bacilli from resected lung lesions in patients who have received no chemotherapy. Instead of being contradictory, however, these two phenomena correspond in reality to two independent aspects of the pathogenesis of tuberculosis. In this connection some experimental findings bearing on this problem are presented.

The failure of drugs to kill all bacilli in infected tissues has been observed, not only in human tuberculosis, but also in many types of experimental infections. This may be illustrated by examples taken from studies in mouse tuberculosis.

Results obtained independently by Dr. McCune of the Department of Medicine of the New York Hospital, and in our own laboratory, may be condensed very briefly. Mice were infected intravenously with doses of culture containing approximately from one hundred to one million organisms. Several strains were used, some virulent, others attenuated. The animals were treated with either streptomycin or isoniazid, or simultaneously with both drugs, the therapy being started on the very first day of infection and continued thereafter. Some of the animals were sacrificed at weekly intervals during three months. Although no macroscopic evidence of tuberculous lesions could be recognized in any animal, living tubercle bacilli could be recovered from all of them, even when BCG was used and when therapy had been continued for 85 days. Moreover, bacillary invasion of the tissues began uniformly within a few days after discontinuance of the drugs. Several lines of experimentation have thrown light on the mechanism of this disturbing phenomenon.

First there must be recognized the all important fact that, despite early claims, it is practically impossible to sterilize cultures of tubercle bacilli *in vitro* by adding to them either streptomycin or isoniazid. True enough, most of the bacilli appear to die rapidly in contact with the drugs, but a few survive prolonged exposure to them. The phenomenon probably has its counterpart *in vivo*. It is probable, in other words, that a certain percentage of the bacilli in an infected individual survive exposure to the drugs, not because they have developed hereditary "drug resistance," but because they exist in a form different from that in which observations are usually made.

Another reason for the difficulties experienced in eradicating infection may be that *in vivo* a large percentage of the tubercle bacilli are present, not free in body fluids but instead within phagocytic cells. Experiments in tissue cultures have revealed that the inhibitory power of streptomycin fails to manifest itself against the growth of bacilli which have been engulfed by monocytes—a fact which

certainly contributes to the inability of this drug to eradicate infection.

This explanation, however, cannot serve in the case of isoniazid, for this drug is just as effective intracellularly as it is extracellularly, in tissue cultures at least. It must be assumed, therefore, either that the bacilli can be engulfed by cells which behave toward the hydrazide in a manner other than that of the monocytes or, more likely, that some factor in the *in vivo* environment antagonizes antibacterial activity. The problem of the existence in tuberculous lesions of substances capable of inhibiting antimicrobial drugs is one worthy of attention. Areas of necrosis, particularly of caseation necrosis, contain a variety of partially broken-down tissue components of unknown chemical composition, many of which are likely to act as drug inhibitors. The finding that drugs penetrate caseous matter is no warrant, therefore, that they can exert their antibacterial action in the physiochemical environment of the lesion.

Bacilli often disappear spontaneously from certain types of lesions, without the help of chemotherapy. This fact is so well documented that there is no need to give more evidence of it. The presence in animal tissues of several substances might be responsible for this effect. These substances are: *(a)* The naturally occurring amines, spermine and spermidine. *(b)* The enzyme lysozyme which does not lyse the bacilli, but can kill them rapidly even in highly dilute solution (1:100,000). *(c)* A basic polypeptide which has been recently isolated from the thymus gland.

Organic acids accumulate in and around tuberculous lesions as a result of the anaerobic metabolism of inflammatory cells and of the activity of the lipolytic enzymes released during necrosis. Bacilli are unable to multiply in ordinary media, and fail to infect laboratory animals, after exposure for several weeks to physiologic concentration of the sodium salts of several organic acids. Sterilization of the cultures occurs when the atmosphere is completely or partially anaerobic and when the CO_2 tension is higher than normal. These are precisely the conditions prevailing in certain types of closed lesions.

There is another problem which has loomed very large during the past two years, namely, whether the bacillary forms which can be seen in resected lesions but which fail to grow in culture media and to cause disease in experimental animals should be regarded as "dead," or merely as dormant but potentially viable, bacilli. None of the evidence adduced so far is of much help in answering it. In my opinion, the techniques used by the various investigators were not adequate to determine the potential viability of dormant bacillary forms.

Organisms in which respiration is at a low level may merely have exhausted an essential metabolite, or be in a resting form akin to that of spore, and yet may be able to multiply when placed in the proper environment. This type of apparent death followed by revival under other conditions is common in many fields of microbiology.

Finally, one should not overlook the fact that tubercle bacilli are present not only in the parenchymatous lesions but also in lymphatic tissues. In cattle which have received a virulent infection after vaccination with BCG and show no overt sign of tuberculosis, the virulent bacilli can invariably be found in lymph nodes for months and years thereafter. It is known that even BCG bacilli can persist for several years in the lymph nodes of man and animal. Laboratory experiments have revealed, furthermore, that prolonged therapy with isoniazid fails to eradicate BCG infection.

All these facts leave the impression that no technique is as yet available to bring about with certainty a complete eradication of the bacilli from infected tissue. After antimicrobial drugs have ceased to exert their restraining influence on infection, either because the infective organisms have become resistant to them or because therapy has been interrupted, only the resistance of the host can act as a brake on reactivation of disease caused by the bacilli surviving here and there, detectable or not by the classical methods of pathology and bacteriology.

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(The Council on Pharmacy and Chemistry of the American Medical Association has adopted the following statement which appears in New and Nonofficial Remedies. 1953, Philadelphia, J. B. Lippincott Company, pp. 171-173, 1953.)

Methantheline Bromide.—*Banthine Bromide (Searle)*

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Clinical studies indicate that the drug effectively inhibits motility of the gastro-intestinal and genito-urinary tracts and, to a variable degree, diminishes the volume of perspiration and salivary, gastric, and pancreatic secretions. It also decreases mucoprotein secretion. Like atropine, it produces mydriasis and cycloplegia when applied locally to the eye or administered systemically, but until more clinical evidence becomes available, its local use for this purpose is not recommended. The value of the drug for preventing abnormal cardiac reflexes through the vagus during thoracic surgery, or as an agent for routine preoperative medication in place of atropine, requires further investigation before final conclusions can be reached.

Methantheline bromide is indicated for clinical use whenever anticholinergic spasmolytic action is desired, provided it is not contraindicated because of its atropine-like characteristics or because of a patient's intolerance to the unavoidable side effects of such therapy. It is useful as an adjunct in the management of peptic ulcer, chronic hypertrophic gastritis, certain less specific forms of gastritis, pylorospasm, hyperemesis gravidarum, biliary dyskinesia, acute and chronic pancreatitis, hypermotility of the small intestine not associated with organic change, ileostomies, spastic colon (mucous colitis, irritable bowel), diverticulitis, ureteral and urinary bladder spasm, hyperhidrosis or control of normal sweating which aggravates certain dermatoses, and control of salivation.

Methantheline bromide produces some degree of cycloplegia and mydriasis in therapeutic doses and therefore should not be administered to patients with glaucoma. It sometimes decreases the ability to read fine print. Xerostomia (dryness of the mouth) is a common sometimes transient, side effect. Urinary retention of varying degrees may occur in elderly male patients with prostatic hypertrophy, and some patients may have difficulty emptying the rectum. Patients with edematous duodenal ulceration may experience nausea and vomiting during initial administration of the drug. These patients should take only liquids during the institution of drug therapy. All patients should be advised of the possible occurrence of side effects. Overdosage sufficient to produce a curare-like action may be counteracted by prompt subcutaneous injection of 2 mg. of neostigmine methylsulfate.

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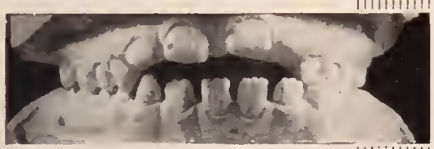
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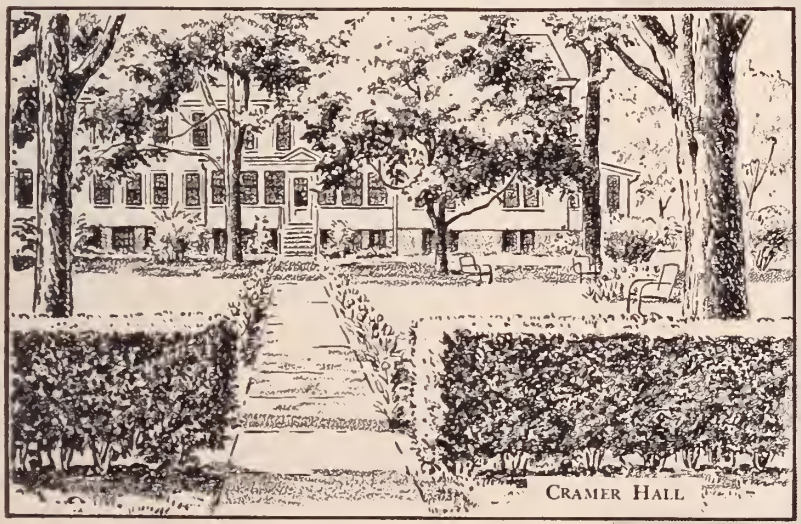
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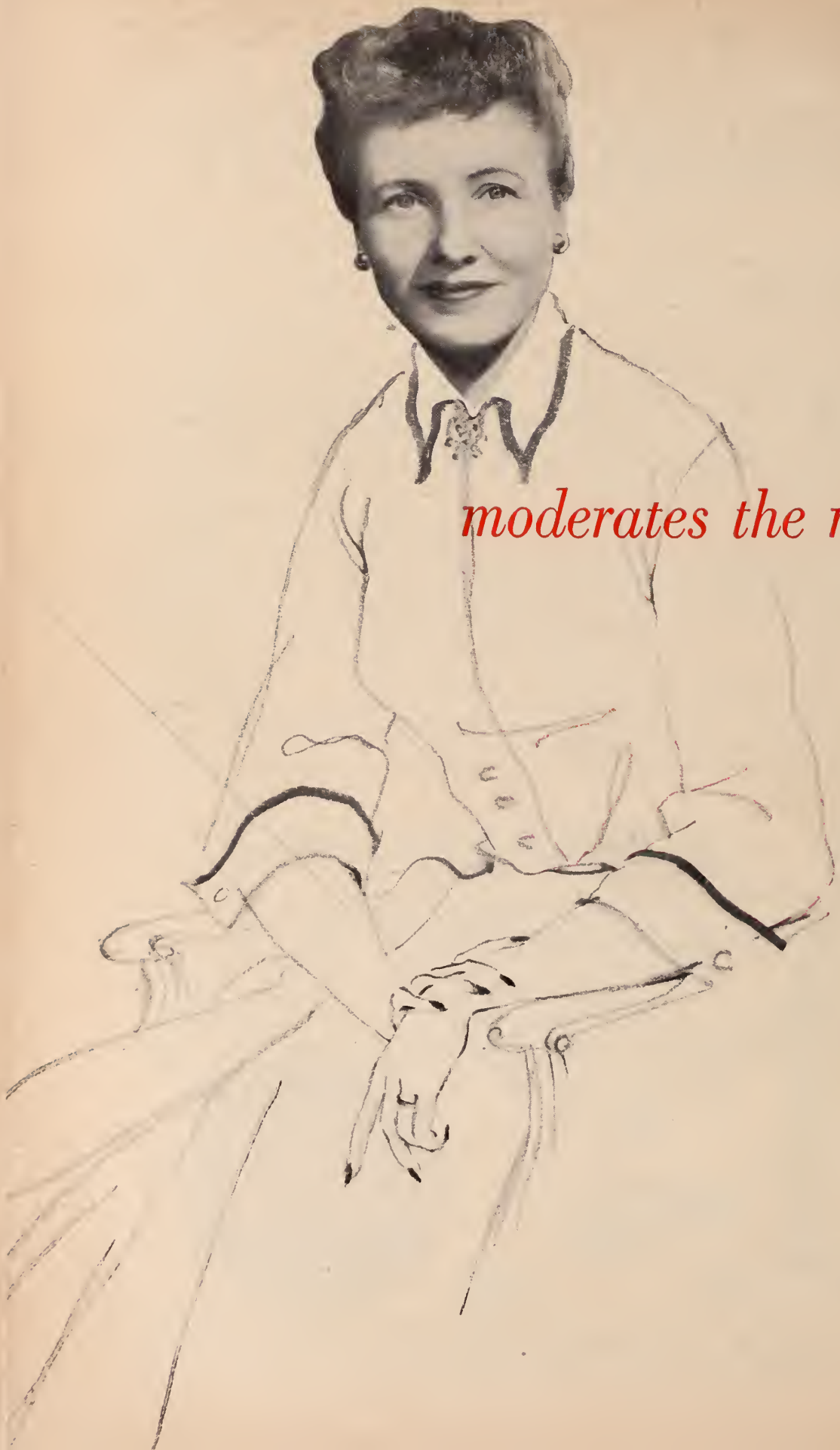
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OF

THE MEDICAL SOCIETY OF NEW JERSEY

Haddon Hall, Atlantic City, New Jersey, May 17, 18, 19, and 20, 1953

THE OFFICIAL TRANSACTIONS

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TABLE OF CONTENTS

(Alphabetical Index on Back Cover)

	Page
MINUTES OF THE HOUSE OF DELEGATES	
Session I	2
Session II	13
Session III	14
MEDICAL-SURGICAL PLAN DISCUSSION	3
ANNUAL AND SUPPLEMENTAL REPORTS	18
RESOLUTIONS	30
GENERAL SESSION	39
BANQUET	48
SPECIAL ADDRESSES	
Harrison F. English	15
Lloyd N. Yepsen	16
George F. Lull	39
Henry B. Decker	40
Stephen C. Y. Pan	42
WOMAN'S AUXILIARY TRANSACTIONS	55

Issued as a Supplement to The Journal of The Medical Society of New Jersey, August, 1953

THE MEDICAL SOCIETY OF NEW JERSEY

Sunday Afternoon Session—May 17, 1953

The one hundred eighty-seventh Annual Meeting of the House of Delegates of The Medical Society of New Jersey convened at Haddon Hall, Atlantic City, at 2:40 p.m., Dr. Harrold A. Murray, President, presiding.

PRESIDENT MURRAY: It is my happy privilege to call to order at this time the 187th meeting of The Medical Society of New Jersey.

On the agenda, the presiding officer is to make a few remarks. They will be very few. I think that we have cooperated with the Lord in getting a little sun down here, and I hope that all of our discussions will follow that pattern and be sunny, happy and fruitful.

Without further ado I am going to introduce some men here on the platform.

On my right you see a young man whom you have never seen around before. He is a professional parliamentarian, a lawyer. Watch out for him. His name is Mr. William E. Bardusch, Jr., from the firm of our counsel, O'Mara, Schuman, Davis and Lynch of Jersey City.

Mr. Bardusch, will you stand up and let these young men see who you are? (Applause)

I might say, when we decided to have a professional—this is an innovation this year—that it was for the sole purpose of keeping me in line, and instantly there was unanimous approval of the selection. I have never met Mr. Bardusch before today, so there is no collusion; I am sure that he is going to guide us and help us in our deliberations.

It is now my privilege to introduce to you Rabbi Martin M. Weitz of the Beth Israel Congregation in Atlantic City, who will give the invocation.

(Rabbi Weitz then gave the invocation.)

DR. MURRAY: The next order of business is the report of the chairman of the Reference Committee on Credentials, Dr. Mulligan, please.

DR. LUKE A. MULLIGAN: Mr. President, I report that a quorum is present.

DR. MURRAY: Thank you.

Dr. Lee and Dr. Forte have been appointed sergeants-at-arms.

Dr. Greifinger, do you also find that a quorum is present?

DR. GREIFINGER (Secretary): A quorum is present.

DR. MURRAY: Thank you.

The minutes of the 1952 meeting have been sent to you; you have read them during the year, and I will entertain a motion for their acceptance, unless there are further additions or deletions.

(Upon motion duly made and seconded, the minutes of the 1952 meeting were approved.)

DR. MURRAY: Are there any delegates from other states?

I know Dr. Carr is here. Dr. Carr is the secretary of the New Jersey State Dental Society, and I will ask Dr. Crowe to escort Dr. Carr to the platform.

I might tell you that Dr. Aldrich Crowe has been appointed by the Board as the Grover Whalen of this convention. He is taking care of all the beautiful people around here, but there is only one woman delegate.

Dr. Carr, the Secretary of the Dental Society. (Applause)

DR. CARR: Dr. Murray, Members of the House of Delegates of The Medical Society of New Jersey: I am quite pleased and quite a little flattered to be invited back again into your House this year. I might add that I feel quite at home, although perhaps a little uneasy, to be with you. That is due, no doubt, to your unfailing kindnesses and hospitality which have always been shown me. Too, it might be due to the similiarity of our organizational and administrative procedures.

About three weeks ago at our annual meeting here in Atlantic City our president said in his address that never before had medical and dental relations been so cordial.

We were quite pleased to have at our meeting Dr. Murray, who also spoke to us. He mentioned quite a few things, among them the importance of dentistry in pediatrics. He mentioned also the importance of a good dental program in the rheumatic fever program. He also stressed the desirability of having a good dental department in hospitals; and the benefits of a concurrent legislative program.

I think these men were both pointing up the fact that if we would lay our aims, ideals and purposes on the table and examine them, we would find much in common. However, this examination and recognition of our common purposes is not all that is desired if we are to obtain the maximum benefits that can be obtained by using the resources of both organizations. We must have more than just a recognition of our common ideals. We must be able to live with one another, not only as organizations, but as individuals, in an atmosphere of understanding, trust and confidence. I think this can be done.

I certainly wish you a most pleasant, profitable and successful meeting. Thank you. (Applause)

DR. MURRAY: Thank you, Dr. Carr.

I might tell you, gentlemen, that during the year I have had occasion to sit in on many conferences with Dr. Carr and the officers of the Dental Society, particularly with our Medical-Dental liaison group which has been planning for the medical-dental school, and their philosophy is very similar to ours; I hope this relationship will continue over the years.

In your envelopes you will find all the printed reports. They are in your hands now and they will be referred to the proper reference committees in one motion.

Now, under new business resolutions from the floor will be presented by county.

Atlantic County; Bergen County. Dr. Barlow.

DR. G. BARTON BARLOW: Dr. Murray, Bergen County has three resolutions to present at this time, all having been approved unanimously at a regular meeting held on May 12, 1953.

Dr. Barlow then read Bergen County Resolutions No. 1, 2 and 3 (See page 30) which were referred to appropriate Reference Committees.

DR. MURRAY: Burlington County; Camden County; Cape May County; Cumberland County; Essex County.

Dr. Greifinger read Essex County Resolution No. 1 (See page 31) Federal Medical Services, which was then referred to the Committee on Resolutions and Memorials.

Dr. Greifinger then read Essex County Resolution No. 2 (See page 31) which was referred to Reference Committee E.

DR. MURRAY: Gloucester County. Dr. Collins.

DR. LOUIS K. COLLINS: At its April meeting the Gloucester County Medical Society unanimously passed this resolution and asked me to introduce it here.

Dr. Collins then read the Gloucester County Resolution (See page 32) which was referred to Reference Committee A.

DR. MURRAY: Hudson County. Dr. Trewhella.

Dr. Trewhella then read the Hudson County Resolution (See page 32) which was referred to the Committee on Resolutions.

DR. MURRAY: Hunterdon County; Mercer County. Dr. Moriconi.

Dr. Moriconi then read the Mercer County Resolution (See page 32) which was referred to Reference Committee C.

DR. MURRAY: Middlesex County; Monmouth County; Morris County; Ocean County; Passaic County; Salem County; Somerset County; Sussex County; Union County. Dr. Satulsky.

Dr. Satulsky then read Union County Resolution No. 1 (See page 33) which was referred to the Committee on Resolutions and Memorials.

DR. MURRAY: Dr. Wegryn from Union County.

Dr. Wegryn read Union County Resolution No. 2, (See page 33) which was referred to Reference Committee E.

DR. MURRAY: Dr. Reuben Sharp.

DR. REUBEN SHARP: There is another report from the Board of Trustees, Mr. President.

Dr. Sharp then read the nominations for membership on the Board of Governors, Medical Service Administration. (See page 33)

DR. MURRAY: I shall refer this to Reference Committee C.

Dr. Sharp then read the nominations for membership on the Board of Trustees of the Medical-Surgical Plan of New Jersey. (See page 34)

DR. MURRAY: I shall refer this to Reference Committee C.

Dr. Sharp then read the report on telephone listings. (See page 34)

DR. MURRAY: They put pediatricians first there. I had nothing to do with that. (Laughter)

Dr. Sharp then read the recommendations on annual meeting sections. (See page 34)

DR. MURRAY: I shall refer this to the Reference Committee on Miscellaneous Business.

Dr. Sharp then read the resolution on the Medical-Surgical Plan. (See page 34)

DR. MURRAY: I shall refer that to Reference Committee C.

Did I brush by Warren County? It's a very important county. Any resolutions from Warren County? (There were no resolutions).

Are there any further resolutions from the floor? Are there any memorials from the floor? (There were none.)

The proposed amendments to the Constitution and By-Laws are printed in the annual reports.

Have we any miscellaneous business that we have not covered now? If not, I should like to thank you for the large number that have attended today, probably the largest, in that there are 220 delegates now in this room.

I shall declare a recess of the House of Delegates until tomorrow at noon, and will now open the meeting to an important part of the meeting — the open discussion of the Medical-Surgical Plan.

I shall ask Dr. Royal Schaaf to come to the platform. I want you to feel free to ask any questions, and I am sure that Dr. Schaaf will have the answers to them. Dr. Royal Schaaf, as you all know, is a Past-President of our Society and is president of the Board of Trustees of Medical-Surgical Plan.

We will excuse the officers now; they say it is very, very warm up here and they can hear better down below.

We have cleared the chairs up here to invite two other very important people to supplement the answers of Dr. Schaaf—Dr. Irving Borsher, medical director of the Plan; and Mr. James Bryan, administrator.

We have just an hour for this so you will be out of here promptly at four-thirty.

Dr. Royal A. Schaaf: Mr. President and members of the House of Delegates: It is a great privilege to represent the Medical-Surgical Plan at this open meeting. It is going to be a free and open discussion, and we shall try to answer any question which any of you direct our way. We have no prescribed agenda, but we thought it would be well if I made a few introductory remarks and spoke briefly on the provisions of the new policy, the provisions of which will eliminate many of the criticisms that have been directed at the Plan from time to time over the years and particularly last year.

You will note that in the annual report published in the May Journal, which you all have, on page 217 there appears a summary of some of the important points in the progress of the Plan. The most notable item is the increased enrollment until at present we have 1,050,000 people enrolled.

In February, The Medical Society of New Jersey was kind and gracious enough to give a testimonal dinner to the Trustees of the Medical-Surgical Plan in celebration of the enrollment of the millionth subscriber. On behalf of the Board I wish to express our appreciation of the consideration which they showed us and for the cooperation which has been given to the Plan over many years and in the face of many difficulties. Any success which the Plan has attained is directly the result of the support the Society has given to it and most notably of the support which we have received from our participating physicians.

The second very important and impressive item is that there is a decrease in the ratio of administrative cost from 51 per cent of subscription income in 1942 to 10.8 per cent in 1952.

The third is the fact that the Plan has been able in the past four years to reduce its operating expense ratio from 13.8 per cent to 10.8 per cent without increasing its subscription charges during that period. This, combined with a favorable claim experience of 79.6 per cent during 1952, has enabled the Plan to transfer to its earned reserve 9.6 per cent of subscriptions in that year.

In consequence, the Plan now has a reserve of $2.60 per enrolled person or the equivalent of 2.7 months of average claim and operating expense. This is better than the comparable reserve factors at the end of 1950 or 1951. It is comparable to many other plans, but it is not quite as high a reserve per person as we would like and hope to attain.

Essentially, the above figures indicate that approximately 90 cents of every dollar contributed to the Plan by its members are disbursed for the payment of medical services rendered, or transferred to reserve against future liabilities for medical services to be rendered.

Now, there is a good deal more in this original report which we hope that all will read and then perhaps ask questions about it if they so desire.

There were a good many criticisms over the years about various aspects of the policy, and in the past eighteen months the Board has been working assiduously toward the development of a new and better policy. You have in your hands the supplemental report which lists the proposed changes which the Board will institute if they meet with the approval of this body at this session.

Briefly, the overall need is to progress—to provide a more attractive opportunity for voluntary pre-payment of medical services by the people of New Jersey, both on a group and a non-group basis.

There is a need to reconsider the Plan's scope of coverage of both medical and surgical services.

We need to revise certain contract provisions relating to the application of the income limit for service benefits that have proved unsatisfactory during the past several years.

Now, there is an outline of the proposed changes which I will just touch on briefly, and you can develop them as much as you like a little later.

One of the most troublesome of the policy provisions was that the income limit was related to the income of the subscriber and not to the total family income. In the new policy the income limit of $5,000 which we are proposing to maintain will represent the combined income of subscriber and spouse, if any. That immediately will eliminate a tremendous amount of unfavorable criticism which we have incurred in the past.

The second change will be in the deletion of the benefits for pre- and post-natal care outside of the hospital. That has been one of our greatest sources of complaint particularly on the part of the specialist obstetrician. We believe that by paying only for services rendered in the hospital a more equitable payment for the total care of the maternity patient can be worked out.

As an additional benefit to compensate for

this change we shall pay for complications of pregnancy requiring treatment in hospital, notably toxemia of pregnancy, placenta previa, pernicious vomiting and some of the other complications. We will pay separately for those in addition to the delivery fee of one hundred dollars. But the cost of that will necessarily be deducted from the number of available medical days for that particular patient.

We are going to expand our surgical coverage in this respect: Presently we pay for surgical services only to bed patients in hospital and for patients for emergency surgical service rendered in the out-patient department. In the office we pay only for emergency surgical services required because of accidental injury, and the limit for that is $25 and the time is the first 48 hours.

Under the new proposal we shall make eligible for payment any out-patient department surgical service benefit which is payable for a bed patient in the hospital. This is an expansion of coverage in itself, but it has the additional advantage of making more beds available in the hospital.

At the present time there are a great many persons hospitalized for relatively minor surgical procedures because if they are in-patients the Plan pays for them; if they are out-patients the Plan does not pay for them.

We will extend the surgical coverage to the physicians' offices to the extent of making available in physicians' offices those services which are presently available in the out-patient department in emergency surgical cases. We will pay an additional benefit up to $50 for emergency service rendered outside of hospital. That represents a considerable expansion of surgical coverage.

There has been a great deal of criticism about the period of postoperative care in difficult and complicated surgical patients. Up until now, under the present policy the Plan pays for the surgical benefit which is stipulated for it and that is supposed to cover 16 postoperative days. Under the new policy the primary fee will cover the surgical service rendered and 14 days of the postoperative care, and the additional care necessary will be available but it will be again charged against the available medical days under that particular policy. This represents a very great improvement so far as the care of the protracted surgical case is concerned.

Item five relates to medical benefits. As you all know, at the present time we pay for 21 medical days in a given calendar year. The medical coverage will be increased to 30 days instead of 21 in a given calendar year. That will certainly do something more for the long-term medical case than it did before, and it is a definite recognition of the obligation of the Plan to give greater consideration, greater benefits, for medical care as opposed to surgical care.

We are expanding the benefits in the case of newborn infants so that they become eligible for service immediately instead of after seven days of life. That is a very obvious expansion of benefit. It needs no special comment.

Consultations. We are proposing to eliminate consultations as an eligible service. The reason for doing that is briefly this: We have under the present provisions of the policy a limitation of two consultations to any one consultant during one admission; the first fee being $15, the second $10, or a total of $25, which is available for consultations to a given one physician in one hospital admission. Now, that has created more difficulty with our specialist internists—I mean men who are certified by the American Board of Internal Medicine and have status as consultants—because if they are participating physicians and they have a limit of $25 it does not represent adequate compensation for highly skilled service.

Another great disadvantage is that we were unable in any way to differentiate between consultation services rendered in your own hospital and instances where the consultant had to go to a hospital at a distance. That is particularly important to a certain group of surgeons, but more to neurologists and internists than any other group. Now a medical man who is a participating physician will no longer be bound by a consultation limit on his consultations.

Another very unfortunate aspect of the consultation provision was that it consciously or unconsciously led to a tremendous imposition upon the Plan. We changed our administrative procedure in reporting claims on April 1, 1951, and — this will sound incredible but it is true—between April 1, 1951 and October 1, 1951—six months—our consultations in number and amount increased four hundred per cent. This represents an almost incalculable and uninsurable aspect of service benefit coverage in prepaid medical care.

The eighth proposal relates to Plan payments in cases attended by non-participating physicians, and our proposal is that payment of any Plan benefit be made only to the *subscriber* for eligible services rendered by a non-participating physician practicing in the State of New Jersey. The explanation of that you will find on page 9. I would like briefly to refer to it, and I think it is so well stated here that I can do no better than skip through it quickly.

Under the terms of the existing contract, Plan payments are made in the same amount and directly to the physician, whether the physician is or is not a Participating Physician. The non-Participating Physician in New Jersey, however, has not accepted the same obligation to the Subscriber and to the Plan as the Participating Physician has accepted. The non-Participating Physician enjoys a greater latitude and freedom of action, and he derives, in many cases, a greater total remuneration for his services than the Participating Physician.

It seems to the Trustees quite illogical and inequitable to deal with a non-Participating Physician in New Jersey, who recognizes no obligation to the Plan, on the same basis as with the Participating Physician, without whose formal cooperation the Plan could not exist.

Where a Participating Physician is involved, the Plan enjoys a contractual relationship both to Subscriber and to the Physician. Where a non-Participating Physician in New Jersey is concerned, since the Plan has no agreement with the physician but does have a contract with its subscribing member, we feel that it is in order that Plan payment be made to our contracting party, the subscribing member.

The non-Participating Physician in New Jersey evidently prefers to do business with the Plan on a cash indemnity basis and wishes to reserve to himself the privilege of making additional charges regardless of the income status of the patient. Therefore it is logical that the Plan payment in such a case be made to the Subscriber as an outright cash indemnity and that such non-Participating Physician should look exclusively to the Subscriber for payment of his charges.

The primary objective of Medical-Surgical Plan is to provide medical services on a service benefit basis. The Plan is dependent upon its Participating Physicians to provide these services.

The Trustees consider it unfair to the Participating Physician to act merely as a collecting agency for the non-Participating Physician in New Jersey, who would thus realize all the benefits of this program without making the essential contribution to it which 80 per cent of the physicians in New Jersey are voluntarily making as Participating Physicians.

The Trustees feel that the Plan cannot ignore the interests, the solid contribution and the wishes of the great majority of the profession, many of whom have expressed themselves as feeling that the Plan should take this means of distinguishing between Participating and non-Participating Physicians in New Jersey.

The Trustees believe that, if a given physician in New Jersey wishes to have the benefit of prompt, direct payment from the Medical-Surgical Plan, he should become a Participating Physician and be listed in active support of this enterprise, which is a part of the official program of public service of The Medical Society of New Jersey and its 21 county medical societies.

In conclusion the Board of Trustees believes it will be possible to make all these changes effective in a new Subscription Contract without any substantial increase in the premium rate paid by the Subscriber, provided, of course, that there be no general increase in the Schedule of Payments. The Board of Trustees has authorized a selective review of certain reductions made in the Schedule of Payments effective March 15, 1952, for the purpose of restoring some of these payments to their former levels. This is being done on the basis of experience and with a view to establishing more equitable fee relationships within the Schedule of Payments.

I might comment here that in the resolution which you just heard introduced by Mercer County it was commented—at least the inference could be drawn—that there had been no increase in benefits under the Blue Shield program in a long time. Actually in 1949, when our third and most recent contract became effective, there was a fifty per cent increase in benefits across the board. I would like to emphasize that point because we hear it reiterated constantly, that our present payments are related to the income of 1942 when the first schedule of benefits was drawn up; whereas, actually it is related to the income prevailing in July of 1949.

Now, with what I hope you may think is a brief preamble, I would like to open the meeting for questions and discussion.

DR. MURRAY: Are there any questions?

Will you please come up here? You can be heard better.

DR. JENNINGS: At the 1952 meeting of the Academy of Pediatricians a recommendation was forwarded to the Medical-Surgical Plan of New Jersey, suggesting that the fee schedule for pediatric care was inadequate. In March of 1953 a schedule of proposed changes affecting pediatric care, whether it be done by a pediatrician or by anyone qualified to do such work, was submitted to be included in the proposed changes. No such changes have been incorporated.

And I noticed that no pediatrician was included on the Board of Trustees of the Medical-Surgical Plan.

DR. SCHAAF: Two years ago in this House of Delegates the gentleman from Mercer County—his name has slipped me at the moment—proposed that a representative of the otolaryngological group be made a member of the Board, and at that time there was a resolution passed by this House that nomination and election to the Board should not be on the basis of the specialty in which any member practices.

We subsequently did elect Dr. Charles Barkhorn a member of the Board, but by no means because he was an ear, nose and throat man, but rather because he was an experienced and interested physician who would speak for the entire medical profession. Dr. Barkhorn has

served magnificently in that capacity; and while, when matters relating to fees for ear, nose and throat people come up, his opinion is solicited and is apt to be accepted, he still serves not as an ear, nose, and throat man, but rather as a general representative of the profession.

I made the point two years ago that Dr. Cosgrove was an obstetrician, but I think, with one or two exceptions, that Dr. Cosgrove has made a greater contribution to the development of the Medical-Surgical Plan than any other member of the Board. And while he concerned himself with the welfare of the obstetricians, it was incidental to the consideration of the welfare of the whole profession.

And so, sir, I would say that we would be happy to have a pediatrician on our Board as a member of The Medical Society of New Jersey, but not with the thought that he was going to represent the pediatric group. I think that probably answers the question.

Does that answer the first part of your question?

DR. JENNINGS: No. The first part was that we did make definite recommendations as to additional fees for skilled performances such as spinal taps and intravenous treatments which are not included under the present schedule, and since they are time-consuming and are skilled procedures it was felt that they should be compensated in some degree with, we'll say, the surgical procedures. The surgical plan or the surgical benefits have been broadened in scope, but there has been no change made in the pediatric fees. All we can get for any procedure is the care of a baby for thirty days, regardless of what is done in addition.

DR. SCHAAF: I would say in reply that one of our numerous committees is the Fee Committee, and the matter of pediatric recognition feewise has been referred to the committee. It is under consideration and we are constantly revising our schedule of benefits. We never can retract our benefits, although we can increase them. I venture to think that in a little while some recognition will be brought about to satisfy the skilled physician in your particular field.

We can't make changes in benefits quickly because change takes actuarial study; if we suddenly increase benefits in one category, it throws the whole fee relationship out of balance. We can only institute increases when we are satisfied that we are not going to jeopardize our financial safety. Our first responsibility as Trustees is to preserve the integrity of the funds. Unless one is working with the problem of the effect of actuarial changes on the balance of the Plan one wouldn't appreciate the significance of what a ten-dollar increase in fee on an appendix means in the total volume. So that while this particular request is under close scrutiny, I think we are going to be able to make the increases you want. We can't makes these changes suddenly without actuarial study, but I assure you they are being considered.

DR. MURRAY: Dr. Borsher, did you want to supplement what Dr. Schaaf said?

DR. BORSHER: I'd like to supplement what Dr. Schaaf has said and especially inform Dr. Jennings that the report as submitted by the pediatric society is receiving current consideration in the review of the fee schedule along with the surgical and medical payments; in the new contract the infant is eligible from the first day of life. That will materially ease for us consideration of the items that were presented by the pediatricians for consideration. I would just ask them to be patient along with all the other groups as far as the current review of the schedule of payments is concerned for the new contract.

DR. MURRAY: Thank you, Dr. Borsher.

Anybody else? Doctor, will you come up here, please?

Anybody else that intends to discuss these matters, come forward, please, to expedite our deliberations.

DR. CARYE-BELLE HENLE: If emergency surgical procedures are to be handled in the private office, these will frequently involve private radiologic procedures. If there is an ambulatory fracture to treat, it cannot be treated unless it is x-rayed. I wonder what provisions are being considered to take care of that patient in the private radiologist's office.

DR. MURRAY: Dr. Schaaf, do you want to answer that?

DR. SCHAAF: Well, the answer presently is very simple. We just don't pay for x-ray in any category. It is one of the most difficult problems that we have to deal with.

The main difficulty with including x-ray service in the present policy, or in any policy, is the fact that in the State of New Jersey there is no uniformity of payment to radiologists. There are at least five or six different methods of payment; radiologists get a percentage of the net income; they rent their quarters; they get a salary; they get this and that. I spent a couple of hours at a meeting of the roentgenologic society last winter, in which I pointed out the almost insurmountable difficulties that any insurance plan would have in including x-ray service in view of the chaotic state which now exists in the method of payment to x-ray people throughout the state.

I get your point, but the answer now is simply we don't pay for any x-rays.

DR. HENLE: Dr. Schaaf, I think that non-uniformity in payment refers to radiologists working in hospitals. I think that a very uniform fee schedule could be agreed upon for emergency office radiology; and I would ask you seriously to consider it because non-consideration of it would mean that all emergency radiology done under the Medical Surgical Plan would of necessity be forced into hospitals, and it's never been the policy of the private physician to force private work into hospitals where it wasn't necessary.

DR. SCHAAF: I am very sympathetic to Dr. Henle's problem, but in the existing circumstances the Blue Cross pays for x-ray service to emergency cases even though they are rendered to out-patients. Since all Blue Shield policy holders are also enrolled in Blue Cross as a matter of practical operation those patients would automatically go to a hospital where they have Blue Cross coverage. However, it is an approach that we have not thought of and that is that x-ray out of hospital for emergency cases might be compensable, but it would have to be compensable on a full coverage basis on an established schedule of benefits, otherwise we wouldn't undertake it. We wouldn't undertake it on an indemnity basis. If it isn't on a service basis, we don't feel that we should include it in our policy.

DR. MURRAY: Thank you, Dr. Henle.

DR. E. MILTON STAUB (Union): First of all, we mustn't forget that the service of the Medical-Surgical Plan is for the benefit primarily of the patients, and it is very difficult at the present time for the patient to understand why, for example, he can have his child's tonsils taken out in the office and be reimbursed therefor, but if, on the other hand, he has a needle, or a mole, or a wart removed from his own person he cannot be reimbursed or cannot have the cost covered by the Medical-Surgical Plan. That has arisen several times and the patients says: "All right, admit me to the hospital to have it done," which obviously means more expense to the Medical-Surgical Plan but also to the hospitalization plan. This is really unfair.

The second thing that is difficult is that at the present time the membership card which the patient has in his possession merely states that the patient has a key letter stating whether he is to be covered by service benefits or not. The difficulty with this system is that very seldom does the patient have a card to present to the physician when he is in the office. I propose that the people for service benefits be given a different colored card so that the physician can merely ask: "Is your card blue or is it white?" By so doing, he will immediately know whether the patient has service benefits or not, because that is a very important thing in estimating fees.

DR. SCHAAF: It isn't often you pick up one like that, but the doctor is wrong about the card. We have nothing on our membership card which indicates one way or another whether a patient has service benefit or is open to service benefit.

You will note, Doctor, if you will look at your claim blank, Part One, in addition to the number of the subscription contract and the name of the employer and the name of the subscriber and the name of the patient, there is a little box which says: Is your income over $5,000 or is it under $5,000? Subscribers put a little X if income is over $5,000 or under $5,000. We have no means of identifying except by the patient's statement to the physician. It is not indicated on our card at all.

DR. STAUB: May I suggest that that be included, because after all that is one part of the blank that is least filled out by the patient. The fact is that if we knew ahead of time whether the patient was entitled to service benefits or not it would be a lot easier to discuss fees.

DR. SCHAAF: All of you know that our policies run from month to month or year to year, and all of you know also that income levels change from day to day and week to week and month to month and year to year. So a card issued today, showing that a patient had service benefits, tomorrow might be totally inadequate. It is not the Plan's business to ascertain the subscriber's income; it's the business of the physician to ask whether his income is over or lower than a certain figure. It would be an administrative monstrosity to try to have the Plan, any plan, figure out what every subscriber's income was. It's got to be done currently with the subscriber or the patient at the time the service is rendered.

DR. KNOWLES: I represent the New Jersey Diabetes Association and, Dr. Schaaf, I was designated to appeal for a more generous contribution to consultants. I see that instead of paying more than $10 for the first consultation or $15 for the first and $10 for the second, the payment for consultations will be discontinued entirely. Perhaps that is better actuarially. In view of the fact that the Plan was established by The Medical Society of New Jersey to help in public relations, I think this matter ought to be considered very carefully by The Medical Society of New Jersey before this step is approved.

DR. SCHAAF: I'm very happy that Dr. Knowles brought out this particular reference to diabetes because it gives me an opportunity to speak on something which has concerned me

very greatly and which should concern all of us. It has been our experience—my own personal experience—that the specialist physicians, including the metabolists, do not object to taking our fees for the care of medical patients. If they get $110 to $135 for 21 days' care in a coronary case, they are not objecting to that. I think that most of them are quite satisfied with it now. But let me show you what actually happens—and you mention diabetes; not long ago metabolists asked me that very question and I said: Doctor, there is nothing you can do but resign from the Plan as a Participating Physician.

What happens is this: A general physician sends in a patient to the hospital, and he has severe diabetes. He calls in a metabolist for a consultation or two consultations and then from day to day or week to week he asks that consultant to again see the patient and to again prescribe. But does the general physician relinquish the case? He does not. He gets the $110, where the metabolist has done most of the difficult care of the case and gets $25.

Now, that is a very definite gripe, and it is one of the main reasons that focused our attention on the appeal to consultations. The Plan can't say to a physician: You should turn that case over to a physician who is competent to take care of it, yet that's actually what it is. If the general physician needs more than a few consultations, he ought to turn it over. That would solve the problem. But that again is something that the Plan as a Board is not concerned with. That is a plan which concerns, you might say, ethics but certainly a sense of fairness and perhaps a sense of propriety. I think it is a shame for a general man to take a case and take $110 and leave the responsibility for the urgent decisions to the consultant.

DR. MURPHY: I come mostly for information rather than criticism. I have three things I'd like to ask Dr. Schaaf.

The first one is, what will happen in periods of prolonged depression if many policyholders lose their jobs and cannot continue as individual subscribers? Do we have a plan where they will be carried for a number of months as unemployed members, with the reserve paying this fee, or are they dropped immediately?

The second thing I'd like to ask is how can we tell by looking at the Medical-Surgical contract card whether it is for an individual contract or a family contract? There may be some way. I haven't been able to tell by looking at the card. I wonder if Dr. Schaaf has an answer to that.

The last thing I'd like to ask him, concerns not Medical-Surgical but Blue Cross. He may not have the answer for this, I don't know, but I wonder how this problem can be approached:

The Blue Cross at the present time pays for eight days for a caesarean delivery. It pays for twenty-one days, as I understand it, for a major surgical case. Now, if a case develops phlebities or pulmonary embolism and has to stay in the hospital over eight days, it brings up a problem.

In New York a caesarean is treated as other surgery—at least the last time I checked on it—being allowed twenty-one days' hospital care. In New Jersey it is allowed eight days' hospital care, the same as for a normal vaginal delivery case.

Now, I'm asking Dr. Schaaf, "What procedure—what modus operandi—can we go through to reach the Blue Cross Plan to ask them perhaps to increase their benefits to 10, 14 or 21 days for complicated cases?"

Thank you.

DR. MURRAY: Can you remember those, Dr. Schaaf?

DR. SCHAAF: You had better ask them one at a time.

DR. MURPHY: The first one I asked was about this prolonged depression: "What will happen to a man who loses his job and can't pay his individual premiums?"

DR. SCHAAF: If the premiums are unpaid at the expiration of the covered date, they automatically become invalid, and the Medical-Surgical Plan can't cope with the problem. After all, the one thing that might cope with it would be the Medical Service Administration on a totally different approach. But the answer is: No, there is no coverage on that.

Now the second one.

DR. MURPHY: The second one was about the card showing the different—

DR. SCHAAF: I think that our card does show that. You can always count on this, that unless a person is single and has coverage, that he either has a husband and wife contract or he has a parent and children, one parent or children contract, or he has a family contract. In other words, if he presents a card of any kind for his whole family, all his dependents are covered.

DR. MURPHY: I very recently had a maternity case that had a card and I was told by the Plan that he was an individual subscriber; he was on payroll deduction. How do you explain that, Dr. Schaaf? He had children and had a wife. I couldn't tell by the card.

DR. SCHAAF: You could tell by asking him personally. If he had a single contract, then of course the wife and the maternity case weren't covered.

Dr. Murphy: That's right; I was told that. But I couldn't tell by the card.

Dr. Schaaf: (to Mr. Bryan) Doesn't our card say it's a family contract?

Mr. Bryan: No.

Dr. Schaaf: We can easily add it. We will do that.

Now, the other relating to Blue Cross—I shouldn't presume to say anything with regard to the Hospital Service Plan except that it is such a close cooperating agency with Blue Shield, and since it is such an integral part of the whole voluntary pre-payment sickness insurance movement, that it is just as vital to the people and to our program as the Medical-Surgical Plan.

I will say this, that the Blue Cross is presently engaged in a revision of its policy, and I know that there is going to be some liberalization of the number of days of hospitalization in caesarean section.

Now, as far as the Medical-Surgical Plan is concerned, we would pick up any complication after the 14th day. If there were a phlebitis or septicemia or what-have-you, we would pick that up on a five dollar a day basis up to 30 days under the new contract.

Dr. Murphy: We do not need then to worry about contacting Blue Cross about additional caesarean benefits because that is under consideration, is that right, sir? I'm talking about hospital care.

Dr. Schaaf: Yes. I happen to know that informally, because as a Trustee of the Hospital Plan I was invited to review some of the provisions of the proposed new contract, and I do know that that is one of the provisions under advisement at this time.

Now, I think it might be well for the society formally to present to the President of Blue Cross a request for expansion of caesarean coverage under Blue Cross. I'm quite sure that they are in the mood to expand that benefit with appreciation of the hardship to many families who have a complication particularly following caesarean; but as I say, I'm not in any position except to inform you very informally that it is under advisement. If you would suggest that, I think that this body, not the Medical-Surgical, but this body might very properly petition the Hospital Plan group to make special consideration of caesareans.

Dr. Murray: Dr. Murphy, Mr. Bryan wants to answer part of that second question.

Mr. Bryan: I merely wanted to state, Dr. Murphy, that if you ran across a patient who has a family and yet has a single person contract, that is an administrative mistake which should be corrected. Ordinarily we issue contracts according to the entire family unit, and we would be glad to know about that.

Dr. Murphy: Well, as I said, my questions were for information and not criticism.

Now, Dr. Murray, I realize the House of Delegates is adjourned. Dr. Schaaf has suggested we petition the Blue Cross to increase the caesarian coverage. Is it legal? What does our Parliamentarian say? Can we say anything?

Dr. Murray: I have been waiting to get something out of him all day.

Mr. Bardusch: Do you want to present a resolution?

Dr. Murphy: Yes, present a resolution.

Mr. Bardusch: You would have to reconvene. You have adjourned. You could do it tomorrow.

Dr. Murray: No, we can't do it tomorrow. Well, is it important enough?

Dr. Murphy: I think it is.

Dr. Murray: Dr. Murphy would bring up something like this; but we'll reconvene.

Dr. Butler: Mr. Chairman, may I suggest that I happen to be the representative of The Medical Society of New Jersey on the Blue Cross and I will be very happy to take Dr. Murphy's suggestion back to them. It won't be necessary to have any motion. (Applause)

Dr. Murray: Thank you very much.

Dr. Staub: Dr. Schaaf didn't answer my other question about tonsils vs. other small tumors.

Dr. Schaaf: It is a fact that presently we pay for tonsillectomy in the office. That is one of the things that crept in the policy originally which shouldn't have been in there. However, I will say that we have made a very careful actuarial study of the cost of all surgical service rendered in offices. We know exactly what the additional premium rate would be to cover that.

Now, we hope before too long to be able to include all office service, but until we get the final computation of our premium rate we don't know whether we can add another twenty cents a month, which is what it would cost, on top of the premium.

What we have to remember in all these changes is this: It would be wonderful to have a policy which is all-inclusive and covers everything, but if you actually develop such a policy it is going to become unsalable. We actually had that experience when the Medical Service Administration first developed a policy which was an inclusive policy—Dr. Lance will remember this; he was president at the time—and we had a beautiful policy. But the premium rate was so high that we didn't have a purchaser; after a year of effort we hadn't

sold a policy, and it then became apparent that that particular offering was unsalable. We then revised our entire approach and talked in terms of catastrophic illness, and we defined catastrophic illness as any illness requiring hospitalization. Now, when we swung over from the 1944 policy which had a family rate of two dollars to the 1949 policy which had a family rate of $3.84, our enrollment dropped quite spectacularly. In fact, we stood still and lost a little. But we finally picked up momentum.

What I am driving at is this, no matter how good a policy you have, it is no good for the people unless it is within their means. In other words, one thing we must not do is price ourselves out of the market for people of low income. It makes no difference in cases of subscribers whose premiums are paid for by the employer, either in whole or in part; but for the individual with low income, who pays his own premium, the difference of twenty cents a month makes the difference between his having no insurance at all or having our policy.

Now, our aim is to keep our premium rate, if possible, below four dollars per month, and we think we are going to be able to do that because of claiming certain benefits that we are now paying in maternity—that is, out-patient maternity—and by consultations, and one or two other savings. But what we hope to do is to give better coverage without diminishing the total value of the policy and still not get above a premium rate of four dollars per month because the one thing we must not do is price ourselves out of the market again.

DR. MURRAY: Thank you.

DR. NATHAN S. DEUTSCH: I have been listening here for a little while about surgeons and so on. It seems to me that the radiologist has become the forgotten man in this whole problem. I know there are mitigating circumstances in certain contracts and hospitals; that has to do with hospitals, not with the private practitioner in radiology.

It seems to me that there is a misunderstanding on this trying to save hospital beds. We can go ahead now and take minor surgery cases, which were unnecessarily put in hospitals to get them done, in the private offices. And there is also an increase in the payment for these procedures; that is, they can get $50 now instead of $25. They can also do the same in the out-patient departments in the hospitals. In amplifying Dr. Henle's remarks about any x-rays needed in emergency out-patient care —we all know they are needed; that not only are there surgical emergencies, as abrasions, lacerations and so on; there are also x-ray emergencies. There are fractures. One can't make a diagnosis of a fracture in certain cases without x-ray.

Now, it seems to me that we are robbing Peter to pay Paul; that is, those cases which ordinarily would be sent to the radiologist's office for x-rays now must go up to the hospital or will go up to the hospital because there they can be paid for through the policy issued by Blue Cross.

I can see no reason why x-rays needed in emergency out-patient care cannot be done in the doctor's office.

Also I want to deal for one moment with another problem. We are all cognizant of the fact that any number of hospital beds are taken up with patients who are sent in for diagnostic purposes only. These cases again would ordinarily have gone to the private radiologist's office, but due to collusion between the practitioner and the patient, we see these patients go to the hospital and again we see inroads on the income—we might as well be frank about it—the income of the private practitioner in radiology.

This is also one way in which the radiologists are being driven into contracts with hospitals in order to preserve their economic status. I think instead of throwing up our hands about contracts with the various hospitals—and this has been going on since 1942, and it is a big problem—we ought to see if something constuctive cannot be done to preserve the private practice of radiology, not only for radiologists as individuals, but as a group, and not possibly sell them down the river as a small group in our Medical Society.

DR. SCHAAF: I think I covered before the reason why emergency x-rays should not be included under Blue Shield because presently the emergency x-ray is payable by Blue Cross, and everybody who has Blue Shield has Blue Cross, so for practical purposes people do go to the hospital for the service.

Now, we are all cognizant of the abuse of Blue Cross coverage in the matter of admissions to hospital for diagnosis only. The greatest abuse is in the admissions for x-ray diagnosis, and it has become so bad that the Hospital Plan is contemplating deleting completely from its hospital coverage all gallbladder and gastrointestinal x-rays, because I think none of you realize the imposition on the Hospital Plan.

Recently one of the hospital in New Jersey had to make restitution in the amount of $15,000 to the Hospital Plan for charges for admission for diagnosis only, which their own records disclosed. And what we have to realize is, ladies and gentlemen, that the Blue Cross is your plan and the Blue Shield is your plan,

our plan. If we impose on either, we jeopardize the whole structure. I know that is a very hot topic, this admission for diagnosis and abuse of, particularly x-ray, coverage. I think that the only way to answer it, to correct it, is to delete from the Blue Cross policy all gastrointestinal and gallbladder x-rays. They can pick up a chest for diagnosis; it doesn't cost them too much; but to pick up a complete gastrointestinal series for diagnosis throws the whole Plan out of balance. I think that the answer is going to be to discontinue such coverage.

Now, if Blue Cross discontinues and we develop some approximation to uniformity, then Blue Shield can pick it up; but with the confused situation that exists now Blue Shield just can't touch it, much as we are sympathetic to the problems of radiologists.

I talked on this subject, as I said before, to the roentgenologists last November, and we are entirely sympathetic to the problem. But the Plan as a plan can't solve it. I mean we are dealing with what are presently uninsurable factors because of the involvement of at least two agencies in the thing.

DR. DEUTSCH: Just one other thing I want to ask Dr. Schaaf. I just want to get it repeated. You say actuarially you can take care of, say, minor surgery in the offices.

DR. SCHAAF: That's right.

DR. DEUTSCH: Actuarially I can't see why you can't also take care of x-ray in the office.

DR. SCHAAF: The reason it can't be taken care of is that unless you increase your premium to meet that extra demand on the Plan, you can't do it. The answer I think simply is that it is such service as not presently included in the premium rate. Now, it is possible theoretically to include it later, but it threatens to throw your premium rate so high as to make it unsalable, then it defeats its purpose.

DR. PURCELL: In our neighborhood the Medical-Surgical Plan is sold to the unions and to people who are purchasing it as complete coverage and the unions are very strong in telling their members that the Medical-Surgical Plan covers them for everything—medical and surgical, in the office, the hospital; that is the way it is sold to them. I think it is a mistake to sell this plan on that type of salesmanship. That is being done in our neighborhood.

Now, a question I'd like to bring up; I have a case right now.

The husband is covered by the manufacturer for whom he works with a medical-surgical complete coverage, from which, after doing rather extensive pelvic surgery, I received a check for $125.00. The wife is also working and I got a check from the Metropolitan Insurance Company for $200.00. The husband wants to know what is going to happen to the difference. I want to know which one I can keep. (Laughter)

DR. MURRAY: Somebody said both, so go ahead, Doctor.

DR. SCHAAF: Are you a Participating Physician?

DR. PURCELL: I'm supposed to be a Participating Physician.

DR. SCHAAF: Then you can only keep the amount the Plan pays you, unfortunately.

You do find—it's like anything else, gentlemen, there are inadequacies, defects, insufficiencies in any plan, but this is the fact, that the average person who has less than $5,000 income can't pay two insurance premiums, and while it occasionally happens, as it apparently has here, it is really a very great rarity and we have to balance the whole thing out on the matter of averages.

We musn't forget that we are occasionally imposed upon because of administrative difficulty or one thing or another, but to balance that we must recall that presently we are being paid for a great many patients from whom a fee was never received.

It is so marked a change in the practice of medicine, that it is the universal complaint that except in large municipal hospitals like Newark City Hospital and the Jersey City Medical Center, there is insufficient work on a charity basis to provide adequate training for surgical residents.

Another thing that I think we often overlook: When we talk about $5,000 we think in terms of every patient who comes into the office as having a family income of $5,000. Now, that is far from the fact. We know that when the Plan was started in 1942, 80 per cent of the families in New Jersey had a family income of less than $3,000 a year, and about 75 per cent now have less than $5,000 a year. But you are getting the top spread; you are getting the fee which is a fairly good fee for a low income person, but you are getting it from everybody, and they are by no means all $5,000 people.

In other words, you have to learn to think in averages. Winston Churchill many years ago, in speaking of insurance, referred to it as, "the magic of averages for the salvation of the multitude."

DR. MURRAY: We have time for one more question. Dr. Alexander.

DR. STEWART ALEXANDER: We know we understand the close relationship between the Blue Shield and the Blue Cross services in this state; we approve of them. However, in cer-

tain circumstances there are groups of otherwise eligible subscribers who, for reasons of their own, on their own decision elect to take hospital protection through means other than the Blue Cross. These groups of people, who would be otherwise eligible, then want to subscribe to the Blue Shield and they are refused (if I am correct) the right to subscribe to our Blue Shield unless they will also purchase Blue Cross. These groups of people criticize our Medical Society and say that we are party to a tie-in sale, which is illegal in other forms of business activity.

I appreciate the reasons why Blue Cross services our Blue Shield and acts as a selling mechanism but I would ask that consideration be given for some mechanism worked out for them to purchase Blue Shield protection.

DR. MURRAY: I will ask Mr. Bryan to answer your question.

MR. BRYAN: It is true, as Dr. Alexander said, that until recently Blue Shield was sold only where the subscriber also had Blue Cross or was taking both at once. However, for something over a year the policy has been different, and we do have subscribers to Blue Shield who do not have Blue Cross. No longer is it required for a new group to take Blue Cross in order to obtain Blue Shield. That change in enrollment policy was agreed upon between the two Plans, and it has not been widely advertised, but we do have a number of subscribers who don't have Blue Cross.

A question perhaps related to that is in relation to non-group enrollment. If a group of people have a hospital plan other than Blue Cross and wish to take out Blue Shield, we do not presently enroll those people on a non-group basis. In other words, they have to meet the same proportion of enrollment for their group as any other group would. I might mention that under the new subscription contract it is a part of the program that we shall work out some means of offering that on a non-group. direct enrollment basis.

DR. MURRAY: Well, that concludes our hour. I want to thank you all for remaining attentively here. Go out and get a little sunshine.

(The meeting was then recessed at 4:35 p.m.)

Monday Afternoon Session—May 18, 1953

The House of Delegates convened at 12:40 p.m.; President Harrold Murray presiding.

DR. MURRAY: I will call the meeting to order, please.

We are very honored on this occasion in having the Secretary of the American Medical Association with us, and I will ask Dr. Aldrich Crowe, our Grover Whalen, as I told you yesterday, to escort him to the platform.

The Delegates arose and applauded as Dr. Crowe escorted Dr. Lull to the platform.

DR. MURRAY: He is limited to only two minutes.

Dr. GEORGE F. LULL: I know the microphone is here, but I'm going to save my thunder until this evening. I understand I have to make a two-hour speech this evening.
(Laughter)

DR. MURRAY: No, not on your life.
(Laughter)

DR. LULL: So I'm just going to say that I am very glad to be here. It has been a number of years since I have been here with the New Jersey State Society, although this is not my initial appearance. I have been here a number of times, and I am glad to be around here and meet my old friends. Thank you very much.
(Applause)

DR. MURRAY: Is Dr. Wentworth in the room, please? Or Dr. Winslow? They are the delegates from the New York State Medical Society. If not, we will proceed with the election report of the Nominating Committee, by Dr. Sigurd Johnsen.

We have a quorum.

DR. SIGURD W. JOHNSEN: Mr. President, members of the Medical Society: The Nominating Committee met last night at eight o'clock with all twenty-one county representatives present and the following report is submitted.

Dr. Johnsen then read the report of the Nominating Committee. (See page 34)

DR. MURRAY: Thank you, Dr. Johnsen.

As you know, Dr. Henry Decker automatically becomes the President of The Medical Society of New Jersey. Dr. Henry Decker.
(Applause)

For the office of President-Elect, for one year, Dr. Elton W. Lance. You have to vote on Dr. Lance.

DR. YAGUDA: Move the nominations be closed.

The motion was seconded.

DR. MURRAY: All in favor say "Aye;" contrary, "No." Congratulations. The Secretary will cast the ballot.

Upon motions duly made, seconded and carried, the remaining nominees were elected to the various offices, and the Secretary was instructed to cast a ballot for each nominee. There were no nominations from the floor.

DR. MURRAY: May I at this time, gentlemen, remind you of the importance of visiting the exhibits. Without the exhibitors we could not run this convention, as you know. They are financially responsible for our success. This year we have about 59 exhibitors. We turned down some 30 or more. We hope that you will go there and sign their cards because over the years we have been enabled to have a very successful meeting by their financial help.

There is also an announcement that those who wish to purchase tickets for the banquet tomorrow night may do so. The admission price is seven dollars.

Is there any new business or anything else?

I will entertain a motion for adjournment.

Upon motion duly made, seconded and carried, the meeting was adjourned at 12:50 p.m.

Tuesday Morning Session—May 19, 1953

The House of Delegates convened at 9:40 a.m.; President Harrold Murray presiding.

DR. MURRAY: It is now my privilege and honor to present to you the visiting delegates from New York. I would like to call on first Dr. Wentworth, the immediate Past-President of the New York State Medical Society.

Dr. Crowe isn't here. Will Dr. Allman please escort Dr. Wentworth to the platform?

Dr. Allman escorted Dr. Wentworth to the platform.

DR. WENTWORTH: Good morning, ladies and gentlemen. It is a very great pleasure to be able to represent the Empire State here this morning with my fellow townsman, Dr. Floyd S. Winslow, whom you know much better than you know me.

I was rather astounded last evening to learn that The Medical Society of New Jersey is forty years older than The Medical Society of the State of New York. I don't know how that ever happened. (Laughter) Pretty late to do much about it now. I don't question your figures. (Laughter)

I have really been delighted in meeting you, to see the manner and character of man you are. It has never been my pleasure to attend school or to live in New Jersey. I had known of it as a place of many beauties, some very vast barrens, an enormous number of criminals (laughter), and some very highly cultured people. Well, New York State has that, too, and I have had some experience in the last two years in learning how to evaluate my fellow citizens in New York State. I'm pleased at your general appearance. Your average looks pretty high to me.

As I view the medical scene, I detect underneath all of the superficial movements, arguments and controversies that engage our immediate attention one very serious question. I find a deep, smoldering and very widespread fear among physicians that hospitals, among other agencies, are endeavoring to control the profession on a business level. Well, of course, that is a thing we can't possibly countenance. If we do, we are sunk. Just as surely as we lower our ethical control level to that of business, we, as other business, will be put under controls—naturally controls by government. That, to me, is a much more serious situation than any likelihood of state medicine, socialization of medicine.

I have no doubt that there are a certain number of hospital directors, trustees, boards of governors who would be interested in trying to control the medical profession as a group of business people. It must be resisted.

I spoke before the Greater New York Hospital Association a week ago tonight; that is, their directors and boards of governors and administrators. I laid that problem before them very clearly, endeavoring to show them that hospitals are not, should not ever be conceived of being businesses; that they are just as completely different from business as it is possible for one group of people to be from another. I endeavored to convince them that they should be most sympathetic, most meticulous in their relationships with the medical profession, because not only could they ruin the practice of medicine by endeavoring to transform their relationships with the profession from one of cooperative ethical service relationships to business, but also they could ruin their own hospitals. They would deprive the hospitals of a certain charm, a certain spiritual element which makes of the hospital one of the finest of human institutions.

Thank you very much, Mr. President, for being permitted to speak to your House. (Applause)

DR. MURRAY: Thank you, Dr. Wentworth.

I will ask Dr. Henry Decker to escort Dr. Winslow to the platform. Dr. Winslow, delegate from New York. (Applause)

DR. FLOYD WINSLOW: Mr. President, members of The Medical Society of New Jersey, and guests: Dr. Wentworth and I had an agreement, when we started this trip, that he would do the talking for the trip; so I, being interested primarily in public relations, am charged with the responsibility of looking after his clothing and an occasional bath, to see that he is fed and clothed properly and that he has a nice time, which we are doing.

So I can only say to you, off the record, as the milk cow said to the hired man on a cold and frosty morning: Thank you for this warm hand. (Applause and laughter)

DR. MURRAY: Dr. Winslow, I think that is a very excellent note to start our deliberations with. (Laughter) Thank you for putting us in that frame of mind.

We will now go to the business of this meeting, and I will ask for the report from Reference Committee A. (See page 35) Dr. Albert Kump.

Dr. Kump read the report of Reference Committee A, which was adopted, section by section, upon motions regularly made, seconded and carried.

DR. MURRAY: Thank you very much, Dr. Kump.

I shall now call for the report of Reference Committee B. (See page 35) Dr. Marcus H. Greifinger, chairman.

Dr. Greifinger read the report of Reference Committee B, which was adopted, section by section, upon motions regularly made, seconded and carried.

DR. MURRAY: Thank you, Dr. Greifinger.

I shall now call for the Report of Reference Committee C. Dr. Herschel S. Murphy, chairman. (See page 35)

This report was accepted as read and approved.

DR. SCHAAF: Mr. President and members of the House of Delegates: I would like to take this opportunity on behalf of the Board of the Medical-Surgical Plan of New Jersey to express our appreciation of and thanks for the tremendous amount of effort given the study of our material by Reference Committee C under the chairmanship of Dr. Murphy. Only those of us who stayed from beginning to end realize the time that was consumed, the heated arguments that ensued, but also realize at the end of the session there was good feeling all around. We are grateful to Dr. Murphy and his Committee for their excellent work.

Thank you, Mr. President.

DR. MURRAY: Thank you, Dr. Schaaf. (Applause)

I shall now call on the Reference Committee on Resolutions and Memorials. Dr. Kustrup.

The report of this reference committee was approved. (See page 38)

DR. MURRAY: I shall ask Dr. English to escort to the platform Dr. Yepsen and his very lovely wife.

The Delegates applauded as Dr. and Mrs. Yepsen were escorted to the platform.

DR. ENGLISH: Dr. Murray, delegates: It is my privilege to introduce to you Dr. Lloyd Yepsen who has been made an honorary member of our association.

I have known Dr. Yepsen for about fourteen years. I believe he has known me about half as long.

Dr. Yepsen's association with the medical profession has always been very close. During World War I, while still in college, he enlisted in the medical detachment of the 350th Infantry.

He did a great deal of work in various types of institutions relating to cranial measurements and brain capacity. He was one of the pioneer participants in the first mental hygiene clinic conducted in 1922 or 1923 in South Jersey under the auspices of the late Dr. Henry Cotton, Sr.

For many years Dr. Yepsen acted as consultant to the New Jersey Crippled Children's Commission, now known as the Bureau of Crippled Children, and was one of the founders of the New Jersey Chapter of the National Society for Crippled Children and Adults. He has been active also in the program for the birth injured and devised a program for them in New Jersey.

He is a past-president of the American Association on Mental Deficiency and is now executive vice-president of this organization, which is the only association concerned solely with the problem of mental deficiency.

It was Dr. Yepsen's responsibility, for many years preceding the establishment of the present Diagnostic Center at Menlo Park, to summarize and interpret to the courts the reports of studies similar to those made now in the Center.

Several years ago the Department of Institutions and Agencies opened the Arthur Brisbane Child Treatment Center, a small residential institution specializing in the care and

treatment of children suffering from personality disorders and emotional disturbances. The screening of all candidates for the Center and their admission has been Dr. Yepsen's responsibility. In this assignment he has worked very closely with members of the medical profession.

He has for many years also been responsible for the admission of all mentally deficient children to the several New Jersey residential schools and is in charge of the State program in mental deficiency.

One of Dr. Yepsen's proudest achievements has been the formation and growth of parents' groups for the mentally retarded. He initiated this movement in New Jersey and it has grown to such proportions that there are now such organizations literally throughout the world.

Last but not least, it became Dr. Yepsen's responsibility recently to take over the administration of one of New Jersey's large residential training schools for higher grade mentally deficient boys. Under his guidance the program is being revitalized and expanded and much is being done for the members in residence.

Dr. Yepsen has, throughout his long career, collaborated closely with members of the medical profession and has always been given their sincere cooperation and encouragement.

As chairman of the Advisory Committee on Mental Hygiene of this Society, I have had occasion to work in close association with Dr. Yepsen and have always found him to be cooperative, understanding and concerned for the public welfare.

Gentlemen, it is a privilege to have the opportunity to introduce Dr. Lloyd Yepsen.

The Delegates arose and applauded.

DR. MURRAY: I cannot add much more to what you have already heard about Lloyd Yepsen. It has been my opportunity to work with him very carefully over the years in this problem of the mentally deficient child. No one knows the amount of time and effort that he has spent in this direction. He has helped every physician who has the problem of getting care for the mentally retarded child. And remember, gentlemen, one out of every hundred children is mentally retarded. Sometimes we think of the more glamorous things—the heart, cancer and the like—but this is indeed a great problem for the medical profession; I can attest to the fact that over the many years that I have known Dr. Yepsen he has been ever at our service.

It gives me added privilege and pleasure to present to him this citation, and I shall read it to you.

This citation is presented to Lloyd Nicoli Yepsen in recognition of his appreciation of the ideals and purposes of the medical profession and his single contribution to the welfare of the people of New Jersey through his constructive efforts in behalf of the mentally retarded children of our State, and to him is granted honorary membership in The Medical Society of New Jersey with all the rights and privileges appertaining thereto.

In testimony whereof, the signatures of the proper officials and the seal of the Society are affixed this nineteenth day of May in the year of our Lord 1953, at Atlantic City. (Signed Harrold Murray and Marcus Greifinger.)

Dr. Yepsen it is a privilege for me to present you with this citation. (Applause)

DR. LLOYD N. YEPSEN: Thank you very much, Dr. Murray.

A bit of catch in my throat—you might appreciate why. This is indeed an honor and a distinction which I deeply appreciate. I hope that I can serve you continuously and I shall vigorously attempt to carry out any obligations placed upon me in accepting this citation.

I just returned from the 77th annual meeting of the American Association on Mental Deficiency, where we have been trying to review our problems throughout the United States and throughout the world. Forty thousand mental defectives were born in the United States last year; a thousand of them in our own State; more than a million and a half are problems in the United States.

We so deeply appreciate the various disciples who are engaged in the solution of some of the problems in this field. We need the help of all of the disciples. We need particularly the help we have always had from the medical profession. For this shall be a two-way thing, a two-way stretch, shall we say, because I feel that I am obligated even more to call upon you and I think you will be obligated perhaps to respond as we seek to solve these problems in New Jersey. New Jersey has had for many years high standing throughout the world due to the fine cooperation we have had from all professions. We want to make our small state even more important in this great problem.

My association with the medical profession goes back more than a half century, when old Dr. Nixon, as I remember, delivered a prematurely born infant. I don't recall lying in the shoe-box in my oven door, but that was my incubator. Perhaps sometime a psychoanalyst will carry me back to those days and will permit me to recall those early moments in the oven door.

But if we can go on in this field, in the field of mental deficiency, which is a field perhaps that we know very little about—the causes are

obscure or unknown—if we can get from you people the information we so desperately need, may be we can work for the end that we and all professions are working for; the betterment of human welfare. Perhaps in another century we will have solved the problems of the mentally deficient. We may have preventive measures which only you people can give us.

It is not without a great deal of humility that I join with you, and I shall be happy to help you as I always have, and please feel free to call upon me at any time. And thank you so much, (Applause)

DR. MURRAY: Now I come to the most important part of this ceremony, the thing that I like to do well and probably best, and that is to talk to a very lovely lady and give her a beautiful bouquet of red roses.

During our deliberations which were lengthy this morning I kept looking at these roses and I was afraid they were going to open up, but they haven't, and I think they are going to stay closed for a long time and remind you, Mrs. Yepsen of your obligation of allowing us to have the very valuable services of your husband for many years.

MRS. YEPSEN: Thank you very much.

DR. MURRAY: Henry said I was supposed to kiss her. I don't know. Dr. Lull is here. (Laughter)

Now we will get back to our regular schedule and we will call on Reference Committee D; Dr. Crandell, for his report.

Dr. Crandell read the report of Reference Committee D, which was approved, section by section, upon motion duly carried. (See page 36)

DR. MURRAY: Thank you very much, Dr. Crandell.

We will now hear the report of Reference Committee E. Dr. Bowen.

Read, accepted and approved. (See page 37)

DR. MURRAY: I will call for the report of the Reference Committee on Constitution and By-Laws; Dr. Saffron, chairman.

Dr. Saffron read the report of the Committee, which was approved in its entirety. (See page 37)

DR. MURRAY: The next and last reference committee will be on Miscellaneous Business. Dr. Coughlin.

Dr. Coughlin read the report of the Reference Committee on Miscellaneous Business, which was adopted, section by section, on motions made and carried. (See page 37)

DR. MURRAY: Thank you very much, Dr. Coughlin.

I shall now ask Dr. Yaguda, who is chairman of the Scientific Awards Committee, to come to the platform and make the announcements of the scientific awards.

DR. ASHER YAGUDA: Mr. President, House of Delegates: The Scientific Awards Committee is anonymous, and as Chairman of the Committee on Scientific Exhibits I am making the report for them. (See page 38)

DR. MURRAY: Thank you very much.

I should now like to request Dr. Lewis Fritts, our newly elected Second Vice-President to come to the platform. (Applause)

You know, I'm not going to say anything more to you people because you have heard me all year, but I just want to tell you right now that last year, as you remember, when I assumed the position of president I told you that way back I was a physician for a ball team, and I also said on that occasion that I envied the manager of that team and I was going to try to simulate his position. One year when I was with the team, they won the pennant.

I like to think today that we actually did it, and the only reason why we did it, of course, is because we had a wonderful team. We had a wonderful pitcher in Henry Decker; a catcher in Marcus Greifinger; third baseman, Dr. Butler—I like to put him third; second, Elton Lance. Each one of you people really constituted a terrific team. I know that you are going on and you are going to do the same work, and I'm going to try to apply for a job on the ball team this year—the Dodgers, I hope.

So now it is my happy privilege to introduce to you a man that we have all learned to love and respect, and I'm sure he will continue the program that we have instituted in our Board of Trustees this year. It is a great honor for me now to present the gavel to a good friend of mine, Henry Decker.

The Delegates arose and applauded.

DR. DECKER: Mr. Junior Fellow (Laughter), Officers of The Medical Society of New Jersey, and Delegates: This is definitely not my shining hour.

I know what happens to that hundredth child that Dr. Murray described. He becomes elected to the office of President of The Medical Society of New Jersey and then attempts to drink up to it. (Laughter)

It is a great privilege and a very pleasant thing to serve as an officer of this Society. It has been especially so during the past year with Dr. Murray because we have agreed on most things. We have not agreed on all things;

we have amicably discussed them; but we are going to carry out his program to the best of our ability, with not more than three changes, and those are not changes in the basic policy of the program.

In traveling up and down and around the State, in the larger counties this program doesn't impress the county societies because their size makes them self-sufficient; but when one gets into the smaller counties south of the Rancocas, that program meant something and they have carried it out and carried it out very successfully, and it has helped the practice of medicine, helped the practitioner, and helped the public.

Now, the only function I have at this meeting is to hit the pulpit here with the gavel and adjourn, which we now do. (Applause)

The meeting of the House of Delegates was then concluded at 11:42 a.m.

ANNUAL AND SUPPLEMENTAL REPORTS

FINANCE AND BUDGET COMMITTEE

David B. Allman, M.D., Chairman, Atlantic City

Enclosed is a copy of the Requested Budget for 1953-54 which has been approved by your committee and the Board of Trustees.

In figuring the per capita assessment for 1954 the actual figure required to meet the budget is $32.50. Your committee did not wish to recommend an increase in the State assessment and agreed to take approximately $20,000 from the surplus account to meet the deficit between the budget and expected income.

RECOMMENDATIONS

1. That the attached budget in the amount of $144,143 be approved.

2. That the per capita assessment for 1954 be $25.00.

March 22, 1953

REQUESTED BUDGET FOR 1953-1954

A-1	Executive Salaries	$ 40,300.00
A-2	Executive Office Salaries	21,220.00
A-3	Executive Office Expenses	3,000.00
A-4	Executive Travel	1,455.00
A-5	House Maintenance	8,546.00
A-6	Treasurer	2,500.00
A-7	Finance and Budget Committee	250.00
A-9	Audit	450.00
A-10	Secretary	3,000.00
A-11	Salary Taxes	1,020.00
A-12	Insurance	1,815.00
B-1	Journal Publication	7,000.00
B-5	Journal Office Expenses	500.00
B-6	Journal Travel	100.00
C-2	Welfare Committee	900.00
C-3	Legislative Committee	7,500.00
C-4	Public Health Committee	1,150.00
C-5	Public Relations Committee	10,000.00
C-6	Medical Practice Committee	1,000.00
D-1	President & Other Officers	4,000.00
D-2	A.M.A. Delegates	4,500.00
D-8	Woman's Auxiliary	5,820.00
D-13	Medical Education Committee	100.00
D-20	Medical-Dental Liaison Committee	500.00
D-21	Medical-Hospital Liaison Committee	500.00
D-22	Medical-Legal Liaison Committee	500.00
D-23	Membership, Directory, Physicians Placement	4,000.00
D-24	Medical Research Committee	500.00
D-25	Medical School Committee	3,417.00
E-1	Board of Trustees	1,500.00
E-2	Contingent	5,000.00
E-4	Judicial Council	500.00
F	Legal	1,600.00
		$144,143.00

TREASURER

Jesse McCall, M.D., Newton

STATEMENT OF RECEIPTS AND DISBURSEMENTS FOR FISCAL YEAR 1952-53

June 1, 1952 — May 15, 1953

RECEIPTS

Cash on Hand, June 1, 1952				$236,940.95
Assessments:	1953 AMA	State	Total	
Atlantic County	$ 2,700.00	$ 3,475.00	$ 6,175.00	
Bergen County	8,625.00	11,900.00	20,525.00	
Burlington County	1,750.00	1,850.00	3,600.00	
Camden County	5,825.00	7,050.00	12,875.00	
Cape May County	675.00	775.00	1,450.00	
Cumberland County	1,650.00	2,000.00	3,650.00	
Essex County	29,425.00	33,496.50	62,921 50	
Gloucester County	1,200.00	1,300.00	2,500.00	
Hudson County	8,675.00	14,400.00	23,075.00	
Hunterdon County	765.00	750.00	1,515.00	
Mercer County	7,075.00	7,450.00	14,525.00	
Middlesex County	4,525.00	5,831.25	10,356.25	
Monmouth County	3,750.00	5,081.25	8,831.25	
Morris County	3,625.00	4,168.75	7,793.75	
Ocean County	1,025.00	1,075.00	2,100.00	
Passaic County	9,650.00	12,043.75	21,693.75	
Salem County	825.00	900.00	1,725.00	
Somerset County	1,475.00	1,975.00	3,450.00	
Sussex County	775.00	825.00	1,600.00	
Union County	11,425.00	12,093.75	23,518.75	
Warren County		775.00	775.00	
Total	$105,440.00	$129,215.25	$234,655.25	
A. M. A. Dues, 1950			150.00	
A. M. A. Dues, 1951			425.00	
A. M. A. Dues, 1952			14,615 00	
Journal Advertising (net)			25,401.58	
Technical Exhibits			11,530.00	
Interest			181.25	
Sale of Maternal Welfare Books			826.00	
Rents			650.00	
Payroll Taxes			297.47	
Refund of budget expenses 1952-53			1,015.52	
Assessments, prior years			100.00	
A. M. A. Dues Collection			1,135.15	
Refund of budget expenses 1951-52			204.27	
Sale of 1953 Membership Directory			553.50	
Accounts Receivable			71.55	
Janitorial Service			349.70	
Refund of overpayment A. M. A. Dues			30.00	
Total Receipts				292,191.24
TOTAL				$529,132.19

DISBURSEMENTS

BUDGET ACCOUNTS

A- 1—Executive Salaries	$ 34,755.05
A- 2—Executive Office Salaries	18,872.60
A- 3—Executive Office Expenses	2,773.29
A- 4—Executive Travel	1,217.72
A- 5—House Maintenance	8,312.01
A- 6—Treasurer	283.77
A- 7—Finance and Budget Committee	57.56
A- 9—Audit	450.00
A-10—Secretary	2,102.44
A-11—Salary Taxes	898.27

A-12—Insurance	1,000.72	
B- 1—Journal Publication	5,000.00	
B- 5—Journal Office Expenses	435.41	
B- 6—Journal Travel	32.00	
C- 2—Welfare Committee	739.15	
C- 3—Legislative Committee	4,895.58	
C- 4—Public Health Committee	1,296.72	
C- 5—Public Relations Committee	14,660.88	
C- 6—Medical Practice Committee	240.08	
C- 7—Medical School Committee	101.21	
D- 1—President	2,637.44	
D- 2—A. M. A. Delegates	3,072.35	
D- 8—Woman's Auxiliary	4,794.31	
D-13—Medical Education Committee	.89	
D-20—Medical-Dental Liaison Committee	284.39	
D-21—Medical-Hospital Liaison Committee	2.18	
D-22—Medical-Legal Liaison Committee	112.80	
D-23—Directory—Physicians Placement Service	3,514.49	
E- 1—Board of Trustees	1,197.80	
E- 2—Contingent	2,228.71	
E- 4—Judicial Council	61.25	
F- Legal	1,777.02	
Total Budget Accounts		$117,807.20
Accounts Payable, May 31, 1952		9,283.00
Annual Meeting		2,189.37
Journal Publication		21,194.33
Commissions—Journal Advertising		3,664.98
A. M. A. Dues, 1950, 51, 52, 53		122,425.00
Janitorial Service		319.70
A. M. A. Dues Collection Expense		979.53
Assessments Refunded—1952		75.00
Assessments Refunded—1953		275.00
House Repairs, Renovations, Equipment		2,148.25
Maternal Welfare Books		1.66
Medical Service Administration		5,000.00
Princeton Research Survey		5,000.00
Budget Expenditures, 1951-52		1,133.75
American Medical Education Foundation		25,000.00
Purchase of Car (net)		1,472.50
Total Disbursements		$317.969.27
Cash Balance, May 15, 1953		211,162.92
TOTAL		$529,132.19

PERMANENT CAPITAL FUND

Cash	$ 3,565.25	
Investments	11,500.00	
Balance, May 15, 1953		$ 15,065.25

ANNUAL MEETING RESERVE

Balance, June 1, 1952	$ 6,072.35	
Revenues, 1953 booth sales	11,530.00	
Total	$ 17,602.35	
Expenses, June 1, 1952 —May 15, 1953	2,189.37	
Balance, May 15, 1953		$ 15,412.98

HOUSE COMMITTEE RESERVE

Balance, June 1, 1952	$ 17,584.92	
Revenue	671.14	
Total	$ 18,256.06	
Expenses, June 1, 1952 —May 15, 1953	2,148.25	
Balance, May 15, 1953		$ 16.107.81

A. M. A. DUES COLLECTION

Balance, June 1, 1952	$ 626.60	
Revenue (1% of collections)	1,135.15	
Total	$ 1,761.75	
Expenses, June 1, 1952 —May 15, 1953	979.53	
Balance, May 15, 1953		$ 782.22

SPECIAL COMMITTEE ON THE MEDICAL SCHOOL

Vincent P. Butler, M.D., Chairman, Jersey City

In 1950, in compliance with a request from The Medical Society of New Jersey, the New Jersey Medical College Commission was created. It consisted of twenty members: eight named by the Governor, four by The Medical Society of New Jersey, four by Rutgers University, and two each by the Senate and Assembly. Later two dental consultants were added. The Commission was authorized and empowered by the Legislature "to study the need for a medical college in New Jersey; to formulate a comprehensive plan for the creation, establishment, and maintenance of a medical college in New Jersey." The Commission made an exhaustive study and reported its findings on March 5, 1951. In its report the Commission states:

To meet the specific and general health needs of New Jersey, a medical college should be created. The opportunity now to build a modern medical college as the integrating force within a comprehensive health program presents a great challenge and a great opportunity to the citizens of New Jersey, to their elected representatives, and to the medical profession. We are confident that the establishment of a medical college would serve to improve substantially the availability and quality of medical care for our citizens. We are confident that such an institution would accomplish the following purposes:

(a) provide urgently needed medical educational opportunities for New Jersey citizens;

(b) enable practicing physicians to keep abreast of the latest developments in the care of the sick;

(c) encourage and facilitate the undertaking of basic and applied research in medicine and related fields;

(d) increase the supply of doctors and related professional health personnel;

(e) and most important, improve the quality of all medical care throughout the State; thereby raising the health standards of all our people.

In order that The Medical Society of New Jersey might properly join forces with the citizens and the elected representatives to further the establishment of the medical school in New Jersey, a Special Committee on the Medical School was formed. Originally it was a subcommittee of the Welfare Committee, but at present it is a committee of the Board of Trustees. The primary purpose of the committee is to utilize all the leadership and influence of The Medical Society of New Jersey to bring into existence a Medical-Dental School in our State. To this end our committee has been working with a similar committee of the New Jersey State Dental Society.

The need for a Medical-Dental School has been thoroughly established by the findings of the Medical School Commission. However, this cannot be made a reality without the support of the public. Your committee is of the opinion that when the public is properly aware of the real need, considerable of the prevailing indifference and apathy will vanish and strong support will develop instead. While we as physicians and dentists appreciate the need from a professional standpoint, the public must be made aware of this need in terms of what the Commission found to be the most important ultimate accomplishment—it would "improve the quality of all medical care throughout the State, thereby raising the health standards of all our people."

The general plan of our committee calls for closely coordinated programs of legislation and public education. Assisting us in our endeavors is a group of outstanding public spirited laymen who, recognizing the need for a medical-dental school, are ready and willing to lend their support to the project. They are being banded together in a "Citizens' Committee for the Medical-Dental School." This committee will be headed by one of the most outstanding and dynamic citizens of New Jersey. The official announcement of the formation of this Citizens' Committee, together with the name of the chairman, will be made during this convention of The Medical Society of New Jersey, and adequate publicity will be arranged for.

The committee has held six meetings during the year. Some of these were in conjunction with the Medical School Committee of the New Jersey State Dental Society. A public meeting was held on September 16, 1952 in the State House at Trenton, at which time many organizations in the state which have been cooperating with us were addressed on the need of a Medical-Dental School in New Jersey by Dr. Willard C. Rappleye, Dean of the College of Physicians and Surgeons of Columbia University; Dr. Alan Gregg, Director of Medical Sciences of the Rockefeller Foundation; and Dr. J. Ben Robinson, then Dean of University of Maryland Dental School.

The county societies have cooperated in selecting a chairman who has worked with the state committee and as a result, many meetings of groups such as service clubs and women's councils have been addressed. The county societies which have radio programs have devoted part of their program to the subject of the medical school. A "Public Relations Manual for County Chairmen" has been produced and given to the county chairmen. This has been mainly the work of a public relations consultant whose services have been authorized by the Board of Trustees out of the budget provided for the committee.

It is the opinion of the committee that progress has been made during the past year in the acquisition of a Medical-Dental School for New Jersey. With the ground work now firmly established, it is expected that definite results will be realized in the near future.

ADDITIONAL NOMINATION FOR EMERITUS MEMBERSHIP

The following nomination for election to Emeritus Membership has been received from the County Medical Societies for consideration of the 1953 House of Delegates:

Monmouth County:

Dr. William G. Herrman, Deal. Age 63. Retired because of ill health. Member in good standing since 1919.

COMMITTEE ON HONORARY MEMBERSHIP

Aldrich C. Crowe, M.D., Chairman, Ocean City

The Honorary Membership Committee is unanimous in its selection of Lloyd N. Yepsen, Ph.D. as the nominee for election to honorary membership in The Medical Society of New Jersey, and the Board of Trustees has approved our recommendation.

Dr. Yepsen is presently Director of the Division of Mental Deficiency, New Jersey State Department of Institutions and Agencies, and has been engaged in the field of mental deficiency for more than thirty years. During recent years he has been called upon to lecture and address groups all over the United States and has conducted numerous surveys of state and other programs for the mentally retarded in various parts of the country. He has written and published extensively in the fields of psychology, special education, delinquency and mental deficiency. As Director of the Division of Mental Deficiency he is responsible for the development and administration of the New Jersey institutional program for the mentally deficient. His leadership in the development of the parents groups for the mentally retarded throughout the United States and other countries places him in the position of effectively aiding many communities in the development of appropriate programs.

In recognition of Dr. Yepsen's appreciation of the ideals and purposes of the medical profession and his signal contribution to the welfare of the people of New Jersey through his constructive efforts in behalf of the mentally retarded children of our State, we recommend Dr. Yepsen's election to Honorary Membership in The Medical Society of New Jersey.

COMMITTEE ON MEDICAL DEFENSE AND INSURANCE

J. Wallace Hurff, M.D., Chairman, Newark

PROFESSIONAL LIABILITY INSURANCE

The year 1952-1953 has been a very busy one for this Committee. Many complex problems have been brought about by the changed conditions applying to professional or malpractice insurance as the result of the adoption of a standard policy and uniform rates by the insurance companies under the control of the National Bureau of Casualty Underwriters. These changes have demanded many hours of consultation and meetings with all interested groups. As a committee representing the members of the State Society we found it most difficult to arrive at any solution at this time. However, your Committee feels that during this troublesome period most of our members are adequately insured and that eventually as the interval of readjustment progresses we will be in a better position to evaluate the changed policy. At present, in accordance with the standard form of contract your protection can be terminated upon ten days' notice, instead of as heretofore, on the renewal date. This places the responsibility of renewal or rejection of existing coverage upon the individual policyholder. We would further emphasize that should the Company desire to discontinue your policy the field of liability insurance available is extremely limited due to present set-up of standard agreements by so-called stock insurance companies.

One of our difficult problems has been to find a solution in relation to protection for physicians undertaking electric shock therapy. There is no question but what losses have been excessive in that particular field of practice. The premium rates charged in the judgment of the Committee and the New Jersey Neuro-Psychiatric Association are definitely inadequate, and will necessitate a revision. Standardized technics by the Neuro-Psychiatric Group have been forwarded to the insurance company to minimize the hazards of these treatments, but to date your Committee has not received their acceptance. However, we can report that, with few exceptions, these risks have been approved for insurance and the rejections have been those with unsatisfactory claim experience.

The Committee suggests that all members of our State Society who have not obtained renewal of their liability coverage communicate with the Chairman of the Insurance Committee in order that we may have complete data of such physicians who cannot be insured.

From the standpoint of experience for the past year it was disclosed that there were 106 claims filed against 89 during the preceding year. Also losses were higher. It is hoped that the increase in premium rates which were adopted in September 1952 will be sufficient to place the business on a more favorable basis, which however, cannot be determined until the year has elapsed. It is therefore essential that all insured doctors take cognizance of the serious loss situation and do their utmost in preventing malpractice claims. We would further appeal for the fullest cooperation of all insured with the Committee on Medical Defense and Insurance for the promotion of our mutual interests.

ACCIDENT AND HEALTH INSURANCE

During the past year, we have reached the highest percentage of participation in our Accident and Health Insurance Program underwritten by the National Casualty Company. Approximately 3,336 of our members, in excess of 75% of our possible eligibles, now hold this policy. Benefits amounting to $178,000 were paid to many of our colleagues during the past year, the smallest claim being $5.00 and the largest $4,733, to three hundred sixty-three claimants. The Company has received the usual number of testimonials expressing satisfaction of the claim service.

Your Committee has received and acted upon two requests for arbitration, which according to our policy agreement permits the Committee on Medical Defense and Insurance to act as sole arbitrator in the event of any claim dispute. Two of the policyholders felt their cases warranted additional compensation beyond that which the company felt the facts in their possession permitted them to go. In both instances the arbitration com-

mittee voted additional compensation to which the company promptly acquiesced. We feel particularly proud of this arbitration agreement in our accident and health policy as it is a most unique provision.

We recommend our continued relationship with E. & W. Blanksteen who have given their wholehearted and thorough cooperation.

We would report that throughout the entire year our official broker, Faulhaber and Heard, Inc., have rendered invaluable service to your Committee and the members of The Medical Society of New Jersey in relation to all insurance problems. They have accumulated extensive statistical data, which as we progress through our present period of transformation, will be extremely helpful in formulating our future program. We would accordingly recommend that Faulhaber and Heard, Inc. be continued as the official broker for The Medical Society of New Jersey.

ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

Lewis C. Fritts, M.D., Chairman, Somerville

The Woman's Auxiliary has been very active during the current year. They have increased their membership by 182. In trying to encourage young women to become nurses the Auxiliary has established 24 new nurse scholarships in the state. They have presented 164 rural health—community health programs before various lay groups.

Last fall the Auxiliary was very active in the election campaign in a non-partisan way in trying to get members of the Society and their families out to vote. During the Better Breakfast Week Program, sponsored by the Society, the members of the Auxiliary participated on both a local and state level and assisted greatly in making the program a success.

The Woman's Auxiliary is becoming more and more an integral part in the workings of The Medical Society of New Jersey. We wish to congratulate them on the fine job they have done in the past year.

WELFARE COMMITTEE

Elton W. Lance, M.D., Chairman, Rahway

The Welfare Committee held four regular meetings during the administrative year. Changes in the plan of the meetings were made which seemed to make for general improvement in efficiency, interest and attendance. Each meeting consisted of a morning and afternoon session, with a break for luncheon at one o'clock. The morning session was given over to an address on timely subjects by an outstanding speaker and the after-lunch session to transaction of business.

Our President, Dr. Murray, assumed responsibility for securing the speakers and the list will show his excellent judgement.

Dr. Lewis Webster Jones, President of Rutgers University, spoke on medical-dental schools in New Jersey at the meeting of June 22, 1952. Dr. Mason Gross, Provost of Rutgers University, added explanatory remarks.

Congressman Robert W. Kean spoke on Social Security at the September 14th meeting.

Dr. Louis H. Bauer discussed the Relationship of the American Medical Association and the State Society at the December 14th meeting.

Dr. Walton Van Winkle, Director of Research, Ethicon Suture Laboratories, New Brunswick, spoke on medical research at the meeting on March 22, 1953.

The work this year was expedited by asking all advisory and subcommittees to hold their meetings at least two weeks prior to the regular meeting date of the Welfare Committee. Proceedings of these sessions including recommendations requiring the consideration and action of the Welfare Committee were mimeographed and distributed so that each member was given an opportunity to study them. This reduced unnecessary waste of time and resulted in more prompt action on important matters.

Attendance at the meetings of the Welfare Committee was good, averaging better than 50 per cent. Attendance at the meetings of the subcommittees was excellent. The general average for all was 72 per cent with, as might be expected this year, the Legislative Committee leading with 78 per cent.

SUBCOMMITTEE ON LEGISLATION

C. Byron Blaisdell, M.D., Chairman, Asbury Park

Meetings: Meetings have been held from time to time, beginning at last year's convention and culminating on March 30th in a most successful and enjoyable buffet supper given in honor of the legislators and shared by officers, keymen and secretaries. Much favorable comment followed this meeting and we feel we know our legislators better, also hope that they understand us and see organized medicine in an improved light. We believe this meeting with our legislators should be repeated next year.

State Legislation: Of the 1,028 bills introduced in both chambers, 73 related to health and 13 to physicians, of which latter group 3 related to dentists, 2 to chiropodists, and 1 to optometrists. Many of these were administrative only but some concerned policy and were approved or disapproved on the basis of merit. Four proposed bills were not introduced by us, pending chiropractic legislation, in order not to develop resistance or invite bargaining. Of these, some could be pressed as soon as the chiropractic bills are settled out, if the legislature adheres to its intention of having only three more sessions, we shall have to wait until next January to move them.

New Jersey Bills: By the time this report returns from the Reference Committee to the House of Delegates, it is highly probable that the chiropractic bills will have been settled. *A-456,* continuing chiropractic licensure by the State Board of Medical Examiners, where it properly belongs, has passed the Assembly, had two readings in the Senate and needs only a final vote. If it passes, and we believe it will, the threat of the chiropractors' having a licensing board of their own will have been defeated, this time not by governor's veto. (A full presentation of the pros and cons of this legislation appeared in the March News Letter.)

A bill, *A-120,* designed to admit to examination for licensure a limited few physicians, residents of New Jersey for at least five years but not graduates of approved medical schools, has passed the Assembly and rests in committee in the Senate. If passed, it would settle an old and irritating annual problem. And since there are no more Class B schools in the United States, the same question should not recur.

Another Assembly bill, *A-129,* would liberalize the regulations governing candidates for examination for licensure who graduate from medical schools in four European counties. It would prevent U. S. medical students from having to become citizens of a foreign country in order to be eligible for admission to examination in New Jersey. Both this bill and A-120, if passed, would not exempt a candidate from the regular examinations of the State Board of Medical Examiners. They are not opposed.

Action on two bills, *S-86* and *A-396,* establishing a Medical-Dental School, was limited to "approval in principle" only, the Society's position being that we are to await the implementation and recommendations of a Citizens' Committee, presently being formed. Sponsors of these bills were assured by personal letters of our appreciation of their efforts toward establishing a medical school in New Jersey.

Assembly 623 is a bill requiring professional and practical nurses, practicing in this state after September 1, 1955, to have current licenses, instead of the present provision permitting nurses to practice in spite of suspension or expiration of license. This bill has passed the Assembly and it rests in the Public Health Committee of the Senate. We approve the purpose of mandatory licensure, but because of opposition of the New Jersey Hospital Association, we are sending the New Jersey State Nurses Association our analysis of the bill's weaknesses. We hope for further clarification of the nurse-hospital differences.

A-380, licensing persons directing bioanalytic laboratories, is a counterpart of a bill which the Society sponsored two years ago. It provides for examination by and payment of a fee to the State Board of Medical Examiners; annual renewal, and annual registration of the laboratories. The bill leaves much to be desired in the matter of qualifications and regulations and also contains a liberal "grandfather's clause." We were assured, however, by representative clinical pathologists, active both in our Society and in behalf of this bill, that this is what they want; so they are once more receiving our support. The bill has passed the Assembly and has had a second reading, after amendment in the Senate.

Many other bills have been studied, too numerous to warrant inclusion in an annual report, and to them we have given our approval or opposition. One, *A-408,* would set up a State medical insurance fund with a 2½% tax on wages and a fee schedule. Luckily, it is buried in committee. Another, *A-526,* would make a physician a disorderly person and subject to a fine of $50 if he failed to report, within 24 hours to the Department of Motor Vehicles, any person *determined by him* to be suffering from a a heart condition or other physical or mental condition which might cause an accident! It has not passed the Assembly, seems to be no threat for this year . . . Many bills were approved, such as air pollution, garbage handling, artificial coloring of non-alcoholic drinks, the establishment of a neuro-psychiatric institute, etc. Anyone, individual or county, desiring specific information on a given bill or on the entire list, may write to the Committee's Executive Secretary, Dr. Joseph F. Londrigan, at the Trenton office.

After several months' trial, the improved method for handling legislation at the State level can be reported favorably.

As outlined in the Membership News Letter of August-September, 1952, and further described in the January 1953 News Letter, emphasis has been placed on (1) securing a quick and competent analysis of proposed bills affecting medicine and health. This is done by a highly qualified lawyer in Trenton, who submits reports and analyses for the Committee's consideration. The Committee then (2) interprets this information in terms of known State Medical Society policy or, if in doubt, gets the approval or advice of the Welfare Committee and the Board of Trustees. Action is then outlined for (3) the county keymen and their associates, who directly convey our position and thoughts to their respective county legislators.

Letters and telegrams also go to the legislators at appropriate times, emanating from Dr. Murray, Dr. Blaisdell, Mr. Nevin, and Dr. Londrigan, at State headquarters. We've made a slow but steady attempt to establish space and method for this work, and files are being built up. Mr. Nevin has given generously of his time and thought to the work of this Committee and is herewith sincerely thanked for his invaluable help and generous efforts, as is the office staff which has expedited and clarified our reports.

National Legislation: Accommodation of American Medical Association policy to the creation of a Department of Health, Education and Welfare, and the meeting of the American Medical Association House of Delegates on March 14th has been the big news out of Washington. Since then the House and Senate have passed Reorganization Plan No. 1, and Secretary Oveta Culp Hobby now sits in the Cabinet. Acceptance by the American Medical Association can be interpreted as a vote of confidence in the Eisenhower administration, for twice before, Congress and the American Medical Association voted down the essentials of this three-way department. But the inclusion of a Special Assistant for Medical Matters, advisory to Mrs. Hobby, was a features of this year's plan gratifying to the A.M.A., and of which Representative Judd (who addressed us last year in Atlantic City) states: "This position was created so the people who have provided the best medical care in the world will continue to provide the best medical care in the world." Former A.M.A. President, Dr. Elmer Henderson, said this official would be able to guard against socialized medicine "by making recommendations to the Secretary."

Doctor Draft Law: Marked discontent with the present law has brought A.M.A. action, with amendments meeting broadly the objections raised across the nation by physicians. Dr. Allman, of our society and an A.M.A. Trustee, reported to our Board of Trustees that practically all of the dissatisfac-

tion indicated in resolutions from our county societies was covered by thirteen points stressed by the A.M.A. and brought to the attention of the Armed Forces Medical Policy Committee. No action has been felt necessary, up to this point, by your Committee on Legislation. (A good summary appears on page 11, Journal of The American Medical Association, May 2, 1953.)

Social Security Extension: This is being studied by the new Department of Health, Education and Welfare. *H.R. 10* (Jenkins-Keogh Bill) which would allow 10% deduction annually, from earned net income or $7,500, whichever is smaller, has been viewed favorably, this year and last, by our Society. There has been no leaning toward social security shown in our meetings to date.

These are the highlights on national legislation. It is not necessary to recount here all the bills facing 83rd Congressional consideration. The 82nd Congress had 14,000 bills introduced, 250 with medical aspects; this year's figures are still a-building. In general, with the good rapport between the new administration and the A.M.A., things look "a little more rosy for good national legislation with the present Congress than it has appeared to be in the last twenty years." International treaties are being challenged (Senator Bricker, Ohio) to keep us from being drawn into socializing measures. Emergency medical care for military personnel *and dependents* is being reviewed by the 83rd Congress, with resistance. Our job is to merit the confidence they appear, in Congress, to have in our judgment and unselfish motivation.

In conclusion, the Subcommittee wishes to express its appreciation for the clear analyses of National Legislation coming from the A.M.A.'s Washington Office, under Dr. Frank E. Wilson. The regional meeting in New York, one of sixteen, was profitable to and appreciated by all of us who attended. Reports from Mr. Stetler, Secretary of the Committee on Legislation of the A.M.A., from Chicago, have been most welcome and helpful.

Locally, we can improve our county response to recommendations from the State Society headquarters. Every county should respond to appeals for concerted action—in unity there is still strength. Don't be indifferent—so much matters!

ADVISORY COMMITTEE ON THE CHRONICALLY ILL

William H. Hahn, M.D., Chairman, Newark

The Advisory Committee on the Chronically Ill was enlarged through the appointment of a representative from each component county society. The representative from the county society was made the chairman of a county committee to be entitled "Committee on the Chronically Ill." It was recommended that liaison be established with other county organizations concerned with the chronically ill program. The county committee is responsible for establishing cooperation between existing health and welfare agencies and for participating with these other agencies in the formation and organization of a local health council. The purpose of the committee would be to stimulate the development of a proper program for the care of the chronically ill under medical society leadership. It was felt that as the program of the newly established division for the control of chronic illness within the State Health Department develops that such committees would be able to cooperate effectively.

The State Committee will be glad to aid the county committees in any way it can. Each county committee, however, is responsible for the program in its own county. The State Committee recommended that the county committee include representatives of the dental and nursing professions, social and welfare organizations, the municipal governments, hospitals, all organizations interested in health problems as well as lay persons, with the physicians providing the necessary leadership.

The State Committee held meetings to which all of the county chairmen were invited. At one meeting Mrs. Thomas Delaney, Director of the Essex County Service for the Chronically Ill was invited to explain the organization and operation of that organization. At another meeting Mrs. Asher Yaguda, Director of the Visiting Homemaker Service of the Essex County Service for the Chronically Ill, was invited to discuss the operation of a homemaker service.

The State Committee was questioned whether it might not interest itself in the coordination of services to patients who were under the responsibility of the various state agencies. A study of this question will be undertaken.

ADVISORY COMMITTEE ON HOSPITAL RELATIONSHIPS

Louis S. Wegryn, M.D., Chairman, Elizabeth

The committee met early last fall with Dr. Harold Murray, President of the State Society, and Mr. William B. Meytrott, President of the New Jersey Hospital Association. It was decided that the most pressing problem confronting the doctors and hospitals was the lack of available beds for patients. Dr. Murray stressed that point in his inaugural address last May under the caption, "Making More Hospital Beds Available" and followed it by a message in THE JOURNAL last October.

After numerous personal contacts with doctors, administrators, and committee members, it was generally agreed that problems of hospital relations can best be solved at the county level. With this in mind the committee has already encouraged formation in each county society of a hospital relationships committee, the personnel of which is to embrace the chiefs of staff of all hospitals within the given county. In event that the president or chief of staff is not a member of the said county society, the secretary or some member of the executive committee could serve in his place.

In accordance with this local plan, it was further decided to set up an intra-hospital relationships committee in every hospital. This hospital relationships committee will be made up of the chief of staff and the secretary, and at least two of the active practitioners of the staff, not necessarily members of the major staff. It is the function of

the hospital committee to hold either monthly or semi-monthly meetings with the administrator of the hospital, to consider reports on patients kept over two weeks, and to deal with any problem within the hospital relating to doctors and administration. By means of the function of this hospital committee, a close check can be maintained on the duration of the period of hospitalization of patients, and internal problems can be dealt with as they arise. It is the function of the hospital relationships committee of the county society to consider and deal with problems that are extra-institutional in character and scope. Such a two-fold program has been working with increasing satisfaction in Union County.

The committee recommended continuation and expansion of this program throughout the state. It further advised that the chairman of each county hospital relationship committee or all chiefs of staff meet with the hospital administrators at the annual convention of the State Medical Society to discuss not only the matter of bed availabilty but other perplexing problems, such as contract practice, anesthesia, physical medicine, laboratory medicine, radiology, insurance plans, nursing care, etc.

The committee considered the request from the Hospital Service Plan of New Jersey that a determination be made regarding the status of certain proprietary hospitals throughout the state as eligible to render "emergency service" to beneficiaries of the Plan. Some fifteen hospitals were listed from various sections of the state. After some discussion, the committee recommended that the Hospital Service Plan solicit the desired opinion from the county medical societies of the areas in which the hospitals in question are located.

ADVISORY COMMITTEE ON NURSING

Andrew C. Ruoff, M.D., Chairman, Union City

Needless to say, the nursing problem is no different in the state of New Jersey than it is in most other leading industrial states. In fact, the more one studies this problem, the more one finds that the opportunities afforded young women and men in a highly organized industrial state make the problem of obtaining new candidates in the field of nursing more complex. Furthermore, the years of privation necessary to perfect oneself as a registered nurse, and to a lesser degree, a practical nurse, are inhibiting factors that cannot be overlooked. Then, too, the many opportunities that are afforded registered nurses in assured steady employment in the federal departments of health, some state health activities and many industrial plants which employ registered nurses, cause the problem of replenishing the dwindling supply of graduate nurses to become even more important.

The Woman's Auxiliary of the State Medical Society, as well as several other foresighted agencies throughout the state are giving the nursing problem consideration and scholarships are being offered by these different groups. This should bear fruit because there are many admirable candidates for the nursing field who are not financially able to support themselves for the several years required to perfect them as graduate nurses. In this connection, I discussed with my committee one suggestion with which I feel each doctor could help very materially—by scanning his own professional field in his own community, and getting at least one young lady or young man to decide on a nursing career as a profession. I am sure that if each member of our society appointed himself a committee of one to keep the ball rolling in this respect, the nursing problem would soon be a thing of the past, so far as obtaining new recruits is concerned.

ADVISORY COMMITTEE ON RADIOLOGY

John L. Olpp, M.D., Chairman, Englewood

The Veterans Administration fee schedule for medical services in the State of New Jersey was reviewed and, after revision, submitted to the Medical Practice Committee.

Inasmuch as the Hospital Service Plan of New Jersey does not actually pay for x-ray examinations, and inclusion of "x-ray and fluoroscopic examinations" in the contracts misleads and confuses subscribers, and fosters hospital admission for diagnostic services only, we strongly recommend that The Medical Society of New Jersey request removal of these "services" from the Hospital Service contracts.

Because x-ray therapy is an accepted form of treatment for many benign and malignant conditions, often in conjunction with, or instead of, surgery, inclusion of x-ray therapy in the Medical-Surgical Plan of New Jersey is reasonable and sound. Hence, the Advisory Committee on Radiology requests that The Medical Society of New Jersey recommend inclusion of x-ray therapy by qualified radiation therapists in the service contracts of the Medical-Surgical Plan, fees to be paid on an indemnity basis for services rendered.

ADVISORY COMMITTEE ON WELFARE SERVICES

A. M. K. Maldeis, M.D., Chairman, Camden

In order to accomplish some more uniform standard of medical service and to establish a satisfactory schedule of fees for medical services to the clients of the various State assistance agencies, the Advisory Committee on Welfare Services recommends further study of the matter beginning with a questionnaire in which certain pertinent questions will be asked. A proposed questionnaire has been submitted to the Subcommittee on Medical Practice for study and opinion. The answers to the questions will be a basis for solution. It seems likely that most of the desired information must come through or from the welfare facility of the State of New Jersey, which is the Department of Institutions and Agencies.

There has recently been issued by the State Board of Child Welfare a schedule of fees for medical services to their clients. From one county comes the question of why fees for similar services vary among the various state agencies. It is hoped that after study the committee may be able to suggest a solution to problems of this kind.

Up to the present time, with the not-too-bad general conditions and the high average of employment, the demands for state or local medical assistance has not been too great a problem. Such a state of affairs may change quickly. Then the matter of medical assistance may become one of great concern.

The committee further feels that the information asked for in the questionnaire will be of considerable statistical value for the files of the Medical Society for present and future reference.

MEDICAL-SURGICAL PLAN

For more than 18 months, the Trustees of Medical-Surgical Plan of New Jersey have been studying desirable changes in the Plan's Subscription Contract. We now wish to report to you some of the conclusions we have reached, and to describe the major changes that we propose to incorporate into a new Subscription Contract.

The revision of a Subscription Contract, affecting, as it now does, more than one million enrolled members, is a major undertaking. Each change in the scope of Plan benefits is certain to have profound effects upon the Plan's actuarial basis and financial position. Each change likewise presents us with new problems in the reorientation of Subscribers and physicians as to the scope of services eligible for benefit under the Plan.

From the mechanical point of view, the issuance of a new Contract is a massive enterprise, costing ultimately several hundred thousand dollars before the transition from the old to the new is completed. For all these reasons, any general revision of the Subscription Contract in such an organization as Medical-Surgical Plan is not an enterprise to be undertaken lightly.

Reasons for Issuance of New Contract

The present 1949 Series Subscription Contract has proved to be both a marketable and workable instrument, as is evidenced by the fact of our enrollment growth. Since July, 1949, when the present Contract began to replace the 1944 Series Contract, the enrollment of the Plan has grown from approximately 300,000 persons to more than 1,000,000. The principal reasons impelling us to undertake a radical revision of the Contract at this time are these:

1. The overall need to progress — to provide a more attractive opportunity for voluntary prepayment of medical services by the people of New Jersey—both on a group and a non-group basis.
2. The need to reconsider the Plan's scope of coverage of both medical and surgical services.
3. The need to revise certain Contract provisions relating to the application of the income limit for service benefits that have proved unsatisfactory during the past several years.

Outline of Proposed Major Changes

The following is an outline of the specific changes of a major nature proposed at this time by the Board of Trustees. Each of these changes will be discussed in detail later in this report.

1. *Income Limit for Service Benefits*

That there be no change in the present income limit for service benefits, which is established at $5,000, except to provide that such limit shall apply to the combined income of Subscriber and spouse (if any) included under the same Subscription Contract.

2. *Maternity Benefits*

(a) That pre-natal and post-natal care rendered outside of hospital be eliminated as an eligible service under the new Subscription Contract, and that Plan payment for obstetrical services shall include only the delivery and post-partum care in hospital.

(b) That complications of pregnancy requiring hospitalization (such as toxemia of pregnancy and placenta previa, but not false labor) be made eligible for payment on a medical care basis when treated in hospitals.

3. *Surgical Benefits*

(a) That all surgical procedures presently eligible to a bed patient shall be made eligible for Plan payment when rendered in the hospital out-patient department without admission of patient as a hospital bed patient; and that Plan payment in such cases shall include up to two postoperative treatments.

(b) That Plan payment be provided, in accordance with the Schedule of Payments (but not to exceed $50.00 in any case) for any operative procedure of any emergency nature when rendered outside of hospital; and that Plan payment in such cases shall include up to two postoperative treatments.

4. *Postoperative Care in Surgical Cases*

That, in hospitalized surgical cases, when postoperative care in hospital extends beyond 14 days of hospital midnight bed occupancy, payment shall be eligible on the basis of a medical case (for services rendered beyond the 14 day period above mentioned) as part of the number of days of medical care to be available under the new Contract.

5. *Medical Benefits*

That the number of eligible days of medical care for a hospitalized patient within a contract year be increased from 21 to 30 days; further, that the Contract provisions relating to medical service in hospital be amended to conform to the existing practice (i.e., that the limit of 30 days be applied to the number of days in which medical service is actually rendered and charged for by the attending physician during hospitalization).

6. *Newborn Infant*

That under the full Family Subscription Contract, a newborn infant shall become an "eligible person" on date of birth (rather than on seventh day of life), but routine services rendered to the newborn child incident to eligible maternity services shall not be eligible for separate payment.

7. *Consultations*

That consultations be eliminated as an eligible service.

8. *Plan Payments in Cases Attended by non-Participating Physicians*

That payment of any Plan benefit be made only

to the Subscriber for eligible services rendered by a non-Participating Physician practicing in the State of New Jersey.

DISCUSSION OF PROPOSED CHANGES

1. *Income Limits*

The proposal to apply the present income limit for service benefits to the combined income of the Subscriber and spouse where both are enrolled under the same Subscription Contract will correct a fault in our present contract that has been frequently and unfavorably noted by many Participating Physicians. We are confident that this change will be readily approved by the medical profession. We also believe that Subscribers generally will recognize that any income limit for service benefits should most properly be applied to the aggregate income of both the adult members of the family unit, wherever both spouses are gainfully employed.

2. *Maternity Benefits*

(a) The proposal to eliminate pre-natal and post-natal care rendered outside of hospital as a service eligible for Plan benefit has been recommended to the Plan by representatives of the New Jersey Society of Obstetrics and Gynecology. The effect of this proposal is that, under the new Contract, the maximum Plan payment to a Participating Physician for an eligible maternity case would be deemed to include the obstetrical service and normal post-partum care rendered in hospital—excluding payment for pre-natal and post-natal care rendered outside of hospital. The maximum scheduled payments for maternity services would be decreased by $25.00 in each case, which amount represents the portion of the present payment that is applied to pre-natal care.

The Participating Physician would arrange privately with the patient as to payment for pre-natal services. This would place maternity services on a basis comparable with hospitalized surgical services, where Plan payment for the surgical procedure is not deemed to include pre- and post-operative service rendered outside of hospital.

From a social point of view, this change in Plan policy seems justified, inasmuch as physicians frequently make charges for pre-natal service in private practice as the case proceeds—thus spreading this expense over a considerable period. Such payments scarcely constitute a catastrophic burden on the patient.

It will be noted that, in 1951, the ratio of maternity cases to all Plan cases was 17.7%, whereas the payments in these cases represented 22.6% of all claim payments.

We propose to utilize the funds diverted from payment for pre-natal care to extend the scope of eligible medical care in hospital and to the broadening of Plan coverage of surgical services, as will be set forth in this report.

(b) The proposal to provide separate payment, on a medical care basis, for complications of pregnancy (such as toxemia of pregnancy and placenta previa, but not for false labor) represents merely a formalizing of administrative procedure under the present Contract. This specification is considered desirable, under the proposed new Contract, in view of the proposal to eliminate payment for pre-natal care as such.

3. *Surgical Benefits*

(a) It is proposed that all surgical procedures that are now eligible for Plan payment in the case of a hospital bed patient shall be made eligible for Plan payment if rendered in a hospital out-patient department without requiring the patient to be admitted as a bed patient. At present, the Plan makes payment for surgical services rendered in out-patient departments only if such services are "of an emergency nature."

(b) Our proposal concerning surgery in out-patient departments should be read in conjunction with our second proposal in regard to surgery. This is that, under the new Contract, the Plan will make payment in accordance with its Schedule of Payments, but not in excess of $50 in any one case, for any operative procedure *of an emergency nature* when rendered *outside* of the hospital.

At present, Plan payments for surgery outside of hospital are limited to a maximum payment of $25 against the services rendered within 48 hours following an accidental injury. Under the proposed liberalization of surgical benefits outside of hospital, it would no longer be required that the condition for which surgery is rendered be due to an accident (but only that the surgical service be of an emergency nature—as is presently required in cases of surgery rendered in the out-patient department) and the maximum Plan payment in any such case would be increased to $50.

Payments made for surgery in out-patient departments or for surgery of an emergency nature outside of hospitals would include up to 2 post-operative treatments.

These two proposals represent a radical expansion of Plan coverage for surgical services and they have seemed most desirable to the Board of Trustees for these reasons:

(a) These changes have been requested by both physicians and Subscribers. At present the Plan is at a distinct competitive disadvantage relative to commercial accidental and health insurance carriers, which as a rule provide surgical coverage in or out of hospital without discrimination.

(b) The extension of coverage for surgical services outside of hospital represents the only major field immediately available for an important expansion of the scope of Plan coverage.

(c) It seems only logical that, if possible, the Plan should make benefits available for surgical procedures which are regularly performed in private practice by physicians in their own offices.

(d) Our present Contract restrictions in this regard undoubtedly produce a considerable amount of unnecessary hospitalization in order that Subscribers and physicians may qualify for Plan benefits for many surgical conditions which normally would be treated in the physician's office.

(e) The proposed changes would bring the Plan into line with most other Blue Shield Plans which provide payment for surgery, either on a general or limited basis, in or out of hospital.

4. *Postoperative Care in Surgical Cases*

The proposal to make an additional payment available to the surgeon on a medical care basis

for necessary postoperative care in hospital, beyond 14 days after the operation, again represents merely a formalization in the Subscription Contract of an administrative procedure presently followed whereby such payment is available wherever necessary postoperative care in hospital extends beyond 16 days.

5. *Medical Benefits*

The proposal to increase the number of eligible days of medical care within a contract year for a hospitalized patient from 21 to 30 days obviously represents an important and desirable expansion of scope of Plan benefit. It is a step in the direction of providing more comprehensive coverage against "catastrophic" illness. Particular notice should be taken of the subsidiary proposal, that the limit of 30 days of medical care will be applied to the number of days in which medical service is actually rendered and charged for by the attending physician during hospitalization. This again represents a formalization of present administrative practice by the Plan.

6. *Newborn Infant*

Here it is proposed that a newborn infant shall become an eligible person on the date of birth, rather than on the 7th day of life, as is required under the existing Contract. While it is still required that routine services rendered to the newborn infant, incident to maternity services, will not be eligible for separate Plan payment, nevertheless this proposal would enable the Plan to make payment, in accordance with the Schedule of Payments, for any other eligible services that may be required in the care of a newborn child from the date of birth, rather than after the 7th day of life.

7. *Consultations*

The proposal to eliminate consultations as an eligible service under the new Contract is made reluctantly by your Board of Trustees. This step is considered necessary in view of the fact that the Plan has no method of determining which physicians are especially qualified for consultation services. Also, the level of payment which the plan is able to provide for consultation services is not considered sufficient to compensate adequately a qualified specialist consultant for such service on a service benefit basis. Many physicians who confine their practice to consultation in their respective fields have found it most difficult to work with the Plan as Participating Physicians. Furthermore, the Plan has found that the incidence of consultations in cases presenting no apparent complications has increased so radically as to demand a re-examination of the basic policy of the Plan in respect to payment for consultations.

8. *Plan Payments in Cases Attended by Non-Participating Physicians*

Under the terms of the existing Contract, Plan payments are made in the same amount and directly to the physician, whether the physician is or is not a Participating Physician. The non-participating physician in New Jersey, however, has not accepted the same obligation to the Subscriber and to the Plan as the Participating Physician has accepted. The non-participating physician enjoys a greater latitude and freedom of action, and he derives, in many cases, a greater total remuneration for his services than the Participating Physician.

It seems to the Trustees quite illogical and inequitable to deal with a non-participating physician in New Jersey—who recognizes no obligation to the Plan—on the same basis as with the Participating Physician, without whose formal cooperation the Plan could not exist.

Where a Participating Physician is involved, the Plan enjoys a contractual relationship both to the Subscriber and to the Physician. Where a non-participating physician in New Jersey is concerned, since the Plan has no agreement with the physician but does have a contract with its subscribing member, we feel that it is in order that Plan payments be made to our contracting party, the subscribing member.

The non-participating physician in New Jersey evidently prefers to do business with the Plan on a cash indemnity basis and wishes to reserve to himself the privilege of making additional charges regardless of the income status of the patient. Therefore it is logical that the Plan payment in such a case be made to the Subscriber as an outright cash indemnity and that such non-participating physician should look exclusively to the Subscriber for payment of his charges.

The primary objective of Medical-Surgical Plan is to provide medical services on a service benefit basis. The Plan is dependent upon its Participating Physicians to provide these services.

The Trustees consider it unfair to the Participating Physician to act merely as a collecting agency for the non-participating physician in New Jersey, who would thus realize all the benefits of this program without making the essential contribution to it which 80% of the physicians in New Jersey are voluntarily making as Participating Physicians.

The Trustees feel that the Plan cannot ignore the interests, the solid contribution and the wishes of the great majority of the profession, many of whom have expressed themselves as feeling that the Plan should take this means of distinguishing between Participating and non-participating physicians in New Jersey.

The Trustees believe that, if a given physician in New Jersey wishes to have the benefit of prompt, direct payment from Medical-Surgical Plan, he should become a Participating Physician and be listed in active support of this enterprise, which is a part of the official program of public service of The Medical Society of New Jersey and its 21 county medical societies.

CONCLUSION

The Board of Trustees believes it will be possible to make all these changes effective in a new Subscription Contract without any substantial increase in the premium rate paid by the Subscriber—provided, of course, that there be no general increase in the Schedule of Payments. The Board of Trustees has authorized a selective review of certain reductions made in the Schedule of Payments effective March 15, 1952, for the purpose of restoring some of these payments to their former levels. This is being done on the basis of experience and with a

view to establishing more equitable fee relationships within the Schedule of Payments.

INFORMATION FOR HOUSE OF DELEGATES

Subject: Division of Surgical Payments by Medical-Surgical Plan of New Jersey:

The Board of Trustees of Medical-Surgical Plan, at a meeting held March 24, 1953, directed that the subject of division of surgical payments be placed on the agenda for discussion at the special session to be devoted to Medical-Surgical Plan by the House of Delegates of The Medical Society of New Jersey on May 17, 1953.

It will be recalled that this subject was under consideration at the 1952 session of the House of Delegates. The Reference Committee report, as approved by the House of Delegates, stated that "Distribution of fees to two or more physicians who have participated in the care of the same patient seems to be an equitable and fair procedure"; and the entire matter was referred to the Board of Trustees of The Medical Society of New Jersey "for a decision on ethical procedure." Thereafter, the Board of Trustees referred the matter to the Judicial Council.

Under date of December 28, 1952, the Judicial Council of The Medical Society of New Jersey announced its decision in this matter to the Board of Trustees of the State Society.

In its decision, the Judicial Council emphasized that to make any division of fees between two physicians in a secret manner is unethical. However, the Judicial Council stated that it "takes cognizance of the fact that separate payment of fees to physicians, both of whom actively participated in the care of the patient and both of whom are being openly compensated with the knowledge and approval of the patient for services rendered, is not involved" in the type of fee-splitting which the Council has found to be unethical.

The conclusion of the Judicial Council was as follows:

"The Judicial Council of The Medical Society of New Jersey therefore concludes that 'fee-splitting' applied in the commonly accepted and opprobrious sense, is a dishonest and secret procedure contrary to the ethical principles of the profession. It nevertheless acknowledges that the possibility exists of an ethical assignment of payment to two physicians who share in the care and treatment of a given patient when the services are rendered and the payment is made with the knowledge and approval of the patient and when such payment is demonstrably in proportion of the worth of the services rendered by the physicians involved."

In recent months, the Plan has again been receiving numerous complaints and requests from physicians that the Plan develop some suitable, ethical method for division of Plan payment whereby the referring physician who participates in a surgical case may be remunerated for his services from the proceeds payable by the Plan for the surgical procedure and eligible after care.

A historic summary of this problem and of the actions of the Board of Trustees of Medical-Surgical Plan regarding it was set forth in the Supplementary Report filed by Medical-Surgical Plan with the House of Delegates in May, 1952. For present purposes, we will repeat only a summary of the position of Medical-Surgical Plan with regard to this problem, as follows:

1. The proposal that a procedure be developed for ethical division of surgical payment did not originate with the Plan;

2. The interest of the Plan is solely to meet a problem that has been presented to it by many members of the profession;

3. The Plan will develop such a program only following approval and recommendation by the profession.

RESOLUTIONS

BERGEN COUNTY RESOLUTION NO. 1

Division of Medical-Surgical Plan Fees

(Adopted May 12, 1953)

WHEREAS, members of the Bergen County Medical Society desire that the Medical-Surgical Plan of New Jersey consider a method whereby each eligible physician who participates in the care of a surgical case may receive payment for such care, and

WHEREAS, the American College of Surgeons "recognizes the contributions of others than the operating surgeon to the care of surgical patients, and the fact that such must be compensated, provided there is no fixed pattern for payment of any particular percentage of fees, and that compensation should be fixed in accordance with the contribution," and

WHEREAS, the Judicial Council of The Medical Society of New Jersey, in an opinion dated December 28, 1952 "acknowledges that the possibility exists of an ethical assignment of payment to two physcians who share in the care and treatment of a given patient when the services are rendered and the payment is made with the knowledge and approval of the patient and when such payment is demonstrably in proportion of the worth of the services rendered by the physician involved," and

WHEREAS, a division of the surgical payment may be acceptable to the Plan provided there is no increase in the cost of the surgical case, and based on the written advice and consent of the operating surgeon, and with notification to the Subscriber of the payment made, therefore be it

RESOLVED: That the House of Delegates of The Medical Society of New Jersey at its 187th Annual Session, request the Medical-Surgical Plan of New Jersey to make available to the profession a method whereby the ethical division of surgical payment as above described may be carried out.

BERGEN COUNTY RESOLUTION NO. 2

State Civil Defense Committee

(Adopted May 12, 1953)

WHEREAS, The Council on National Emergency Medical Service of the American Medical Associa-

tion was established in 1947 to assist the Federal Civil Defense Authorities, and

WHEREAS, The Council has stressed the necessity for the acceptance by the medical profession of its responsibility in this regard, and

WHEREAS, The Council has striven to project its influence on State component medical societies, and

WHEREAS, The recent report of the Council on a survey of medical preparedness throughout the country—as of July 1, 1952—reveals that New Jersey is one of two states without a state medical society emergency medical service committee, and

WHEREAS, The Bergen County Medical Society has organized a Civil Defense Committee and there does not therefore exist a direct channel of liaison with the A.M.A. Council through the State Medical Society for guidance, now therefore

BE IT RESOLVED:

1. That The Medical Society of New Jersey formulate an Emergency Medical Service Civil Defense Committee.

2. That this Committee—so formed—initiate a program for the guidance of all component county medical societies in this sphere of medical civil defense.

BERGEN COUNTY RESOLUTION NO. 3
Civil Defense Volunteers' Insurance
(Adopted May 12, 1953)

WHEREAS, The Senate and General Assembly of the State of New Jersey have demonstrated a realization of its responsibility in providing for the disability, death, medical and hospital benefits for civil defense volunteers, and

WHEREAS, The Senate and General Assembly is providing for these benefits enacted as law 10 April 1952—Chapter 12, P. L. 1952 (Senate No. 61) —as a public law of the State of New Jersey, and

WHEREAS, In this law, under "Terms Defined" Paragraph 1, the subparagraph 3 renders coverage provisions under conditions described as "during attack, actual or imminent" to air-raid wardens only and denies these same provisions to other groups—medical and non-medical—who, by statement of the Deputy Civil Defense Director might be required to render assistance "during attack, actual or imminent," and

WHEREAS, The above coverage provisions appear to be discriminatory legislation in favor of one group of volunteers and not in favor of other groups who might have to render aid under such equal conditions, and

WHEREAS, Increasing public knowledge of such discriminatory legislation would tend to obstruct recruitment of civil-defense volunteers in the groups so discriminated against and hence hamper the development of a sound civil-defense medical program and organization, now therefore

BE IT RESOLVED:

1. That the Bergen County Medical Society considers Chapter 12, P. L. 1952 (Senate No. 61) in particular regards to the provisions enumerated under subparagraph 3 of Paragraph 1 under "Terms Defined" to be discriminatory legislation against a large group of civil-defense volunteers—medical and non-medical.

2. That the Bergen County Medical Society respectfully requests The Medical Society of New Jersey to exert its influence with the Senate and General Assembly and the State Civil Defense Authorities to secure amendments to the above law climinating the above discriminatory features.

3. That the Bergen County Medical Society notify the Deputy Director of Civil Defense, Mr. Thomas A. Dignan, of their opinion regarding this law and that the Society will support him in securing amendments designed to rectify and eliminate these discriminatory features.

ESSEX COUNTY RESOLUTION NO. 1
Veterans' Care

WHEREAS, the House of Delegates of the American Medical Association having considered the report of the Special Committee on Federal Medical Services failed to take positive action as recommended in said report and,

WHEREAS, it is imperative that the American Medical Association establish a definitive program for the care of veterans of our Armed Forces which will include the scope and limitations of government responsibility to the veteran and his family.

THEREFORE, be it resolved that the House of Delegates of The Medical Society of New Jersey direct its Delegates to the American Medical Association to present a resolution at the June meeting of the American Medical Association which will request a reconsideration of the report of the Special Committee on Federal Medical Services (Dr. Martin, Chairman) and such other data as may be pertinent to this problem, for the purpose of establishing a definite program.

ESSEX COUNTY RESOLUTION NO. 2
Physicians' Retirement Bill

WHEREAS, existing federal tax laws allow employers to provide retirement benefits for their employees through pension plans and profit-sharing trusts and permit the deduction of the costs of such benefits from taxable income of the employer, and

WHEREAS, the cost of the benefits purchased for employees under such retirement plans are excluded from the taxable income of such employees, and are taxed to them only when distributed or made available to them, thereby enabling such individuals to enjoy preferred tax treatment, and exempt costs of retirement benefits, and

WHEREAS, the aforementioned benefits are not afforded under the prevailing tax law to professional men who are self-employed, and

WHEREAS, there are presently pending before the Committee on Ways and Means, two bills, respectively known as H.R. 10 and H.R. 11, which bills, if enacted into law, would tend to eliminate the present tax discrimination against professional men,

NOW THEREFORE, The Essex County Medical Society, at its regular meeting held on May 14, 1953, by motion duly made, and duly seconded, does hereby resolve,

That the Essex County Medical Society, (of New Jersey), urge that The Congress of the United States amend the Internal Revenue Code to eliminite the arbitrary discrimination against self-employed and professional men with respect to retirement benefits, and be it

FURTHER RESOLVED, that the Essex County Medical Society, (of New Jersey), express its approval of and render its endorsement to the House of Representative Bills Nos. 10 and 11, as respectively introduced by Congressman Thomas A. Jenkins and Congressman Eugene J. Keogh, or, in the the event that said bills are amended or modified, but still substantially retain the same basic tax benefits for self-employed professional men, that such amended or modified bills as may be subsequently introduced, be, and are hereby supported and endorsed, and be it

FURTHER RESOLVED, that copies of this resolution, duly certified by the Secretary of the Essex County Medical Society, be forwarded to all of the present members of the Ways and Means and Senate Finance Committees, and to Mr. Colin F. Stam, Chief of Joint Staff, at Washington, D. C., and to The Medical Society of New Jersey, enlisting their support.

GLOUCESTER COUNTY RESOLUTION

Legislative Executive Secretary

WHEREAS, The Medical Society of New Jersey has employed a legislative analyst who is doing excellent work in Trenton; and

WHEREAS, the office of executive secretary of the Legislative Committee has thus become superfluous;

THEREFORE BE IT RESOLVED, that the House of Delegates here assembled recommend to the Board of Trustees that the office of executive secretary of the Legislative Committee be abolished; and

BE IT FURTHER RESOLVED, that such monies saved by the above move be used to enhance and augment the activities of the legislative analyst, to further insure that The Medical Society of New Jersey shall be informed up to the minute on legislative affairs.

HUDSON COUNTY RESOLUTION

Correction of Hospital Abuses

WHEREAS, certain hospital boards of trustees, and hospital administrators have seen fit to predicate staff privileges upon susceptibility to pressure to make "voluntary" cash donations; and

WHEREAS, certain hospitals have been and are collecting professional fees for services rendered by their intern or clinical staffs, especially to compensation cases, and

WHEREAS, certain hospitals are by various devices practicing medicine and collecting professional fees, and

WHEREAS, certain hospitals are guilty of a variety of offenses against the ethics, the rights and the privileges of their licenses

THEREFORE BE IT RESOLVED:

1. That The Medical Society of New Jersey go on record as strongly disapproving such actions of said hospitals and

2. That The Medical Society conduct a thorough investigation of such charges and that definitive and punitive action be taken against hospitals found guilty.

MERCER COUNTY RESOLUTION

Medical-Surgical Plan

WHEREAS, the Medical-Surgical Plan of New Jersey was originally devised and organized for two specific purposes: first, to provide for the payment of medical and surgical fees for services rendered in catastrophic illness to people of low income; and second, to combat socialized medicine,

WHEREAS, the physicians of the State of New Jersey enthusiastically supported the Plan, cooperated, and willingly accepted reduced fees in order that these people of reduced income could obtain the full benefit of their knowledge and services,

WHEREAS, in the past few years the Plan no longer has restricted itself to people of low income but has sold the insurance to persons of incomes up to $5,000 without a proportionate increase in the fees payable to participating physicians, creating a peculiar and unsavory situation throughout the state in that physicians have been forced to use two sets of fees, one as promulgated by the Medical-Surgical Plan (which in most instances is too low) and a second which is more closely related to the present national income,

WHEREAS, other elements noteworthy of comment have crept into the Plan, such as the apparent necessity for its trustees to devise means of paying assistants' fees; the apparent abuse of the consultation request; the question of division of fees between the surgeon and/or his assistant, and/or the referring physician, etc., etc.,

WHEREAS, the great majority of insurance companies reimburse patients by the payment of fixed fees for services rendered, not interfering with the time-honored custom of permitting the physician to charge a fee commensurate with the financial abilty of the patient to pay and/or what the doctor believes his services are worth.

WHEREAS, in view of the foregoing, the Mercer County Medical Society feels that a change in the structure of the Medical-Surgical Plan and its method of full payment of medical and surgical fees, is necessary, therefore, be it

RESOLVED, that the House of Delegates of The Medical Society of New Jersey recommend to the Board of Trustees of the Medical-Surgical Plan that it take under serious consideration a change in the so-called "complete service" feature of the Medical-Surgical Plan as it exists today and that in its stead, a policy be offered to the public containing insurance medical benefits of the indemnity type, and

BE IT FURTHER RESOLVED, that the House of Delegates of The Medical Society of New Jersey recommend to the Board of Trustees of the Medical-Surgical Plan that it consider offering policies of the indemnity type containing greater medical benefits to persons of greater incomes at proportionately increased premium rates, and

BE IT FURTHER RESOLVED, that following appropriate, pertinent and exhaustive study of the recommendations of the preceding two resolutions if the Board of Trustees of the Medical-Surgical Plan considers the present type still indispensable, then a thorough revision of the Plan be undertaken, offering coverage only to persons with total gross family incomes of $3,000 or less, and contain-

ing provisions which actuarial experience during the past has determined feasible and practical, even at the risk of lowering some of the fees payable to participating physicians in order to obtain and maintain solvency, and

BE IT FURTHER RESOLVED, that the Board of Trustees of the Medical-Surgical Plan nevertheless devise an insurance policy offering to persons whose gross family incomes exceed $3,000 coverage of the indemnity type with fixed medical benefits.

UNION COUNTY RESOLUTION NO. 1

Federal Reorganization Plan No. 1

The Union County Medical Society feels that the medical profession was betrayed by Reorganization Plan No. 1 of the Federal Government and submits the premise that the leaders of the American Medical Association were misled before March 14, 1953, by approving this Plan without proper conception of its implications.

Therefore, the Union County Medical Society respectfully submits the following resolution to The Medical Society of New Jersey for its consideration and adoption:

WHEREAS, The House of Delegates of the American Medical Association was called into special session by the Board of Trustees without providing the various state and county medical societies with advance information relative to the present Federal Administration's Reorganization Plan No. 1 of 1953; and

WHEREAS, The House of Delegates of the American Medical Association endorsed the President's Reorganization Plan No. 1 of 1953 and was influenced by promises of the appointment of a doctor of medicine to the newly created post of Special Assistant to the Secretary of the Department of Health, Education and Welfare; and

WHEREAS, a study of this Plan in Congress reveals that there is nothing in the Plan which guarantees the medical profession appointment of a practicing physician to the post of Special Assistant to the Secretary and that the appointee to this post will have no administrative function and can act in an advisory capacity only; therefore be it

RESOLVED, by the Union County Medical Society in regular session assembled this 13th day of May, 1953, that:

1. This Society disapproves the action of the Board of Trustees in calling a special session of the House of Delegates of the American Medical Association under the circumstances existing at that time.

2. This Society disapproves of the action of the House of Delegates under pressure of misleading promises, which action resulted in placing 160,000 physicians of this land, including many veterans who have made great sacrifices, in the false position of approving the No. 1 socialistic venture of this great nation's history.

3. This Society urges The Medical Society of New Jersey to recommend that the Constitution and By-Laws of the American Medical Association be amended so that it will be impossible in the future for the officers and/or Trustees to call and plan a meeting of the House of Delegates such as that held in Washington on March 14, 1953, to prevent a course of surrender which we have followed.

4. This Society further urges The Medical Society of New Jersey to request from its representatives in Congress that an immediate amendment to Reorganization Plan No. 1 be passed clarifying beyond any doubt whatsoever the professional qualifications and function of the special assistant referred to in Section 3 of the Plan.

UNION COUNTY RESOLUTION NO. 2

U. S. Constitution Amendment

WHEREAS: America is the product of a people's faith in constitutional law designed to protect the property and enterprises of each citizen from political invasion or conquest, and

WHEREAS: Attacks upon this principle have produced many governmental agencies which are now in active conflict with the individual enterprises of the American people, and

WHEREAS: Many proposals coming before Congress, will, if adopted by a mere majority, further jeopardize the rights of the American people to their individual property and enterprises, and

WHEREAS: The intent and purpose of the Tenth Amendment to the Constitution was to prohibit governmental exercise of powers not specifically delegated to it, and

WHEREAS: The intention of the Fifth Article of the Constitution was to provide a means for the proper delegation of powers to government through a procedure which requires a two-thirds majority of both Houses of Congress and the approval of three-quarters of the States.

THEREFORE, BE IT RESOLVED that we, the members of Union County Medical Society in regular session assembled this 13th day of May, 1953, exercise our constitutional power to petition the Congress to preserve the intent and purposes of the Constitution by initiating an amendment to the Constitution, for submission to the people of the various States, to provide that:

The government of the United States shall not engage in any business, professional, commercial, financial or industrial enterprise except as specified in the Constitution.

BE IT FURTHER RESOLVED that a copy of this Resolution be spread upon the minutes of this meeting, and that copies of it be sent to (1) the President of the United States, (2) members of both Houses of Congress from this State, (3) members of the State Legislature from this and adjacent districts, (4) the Governor of this State, and (5) two copies to the American Progress Foundation, 1540 No. Highland Ave., Los Angeles 28, California.

The Union County Medical Society requests the approval and adoption of the above resolution by the House of Delegates of The Medical Society of New Jersey.

BOARD OF TRUSTEES

Medical Service Administration of New Jersey

The Board of Trustees of The Medical Society of New Jersey recommends the following nominations for membership on the Board of Governors of Medical Service Administration of New Jersey:

Harry N. Comando, M.D.; William F. Costello, M.D.; Arthur W. Lunn; Royal A. Schaaf, M.D.; Rudolph C. Schretzmann, M.D.; Edward W. Sprague, M.D.; John S. Thompson; Thomas J. White, M.D. (*)

(*)—The nomination of Dr. White is submitted to fiill the vacancy created by the resignation of Samuel A. Cosgrove, M.D.

MEDICAL-SURGICAL PLAN OF NEW JERSEY

The Board of Trustees of The Medical Society of New Jersey recommends the following nominations for membership on the Board of Trustees of Medical-Surgical Plan of New Jersey:

Charles W. Barkhorn, M.D.; Irving P. Borsher, M.D.; Lewis W. Brown, M.D.; Harry N. Comando, M.D.; Patrick H. Corrigan, M.D.; William F. Costello, M.D.; Arthur W. Lunn; Royal A. Schaaf, M.D.; Rudolph C. Schretzmann, M.D.; Edward W. Sprague, M.D.; John S. Thompson; Thomas J. White, M.D.; Carl K. Withers; Paul Mecray, Jr., M.D.; Joseph P. Donnelly, M.D.; Joseph M. Keating, M.D.

TELEPHONE LISTINGS

The Board of Trustees endorse in principle the following points re classified telephone listings and refer them to the House of Delegates with the recommendation that the points be referred to the component county medical societies for implementation:

1. We think listing can include "general practice" after the doctor's name instead of identifying the general practitioner with an asterisk.

2. We can see no objection to using the phrase "available for emergency calls" if the doctor so desires.

3. As far as specialists are concerned, we think that instead of printing "pediatrician" or "obstetrician" the wording after the name might be "practice limited to pediatrics, surgery, or obstetrics, etc."

ANNUAL MEETING SECTIONS

In accordance with the action of the 1952 House of Delegates that the Board of Trustees study and evaluate the schedule of section meetings, a special committee of the Board met with members of the Annual Meeting Committee and Sections Officers to discuss a plan of unification of the annual meeting scientific sections.

The following recommendations of the group were approved by the Board of Trustees and are referred to the House of Delegates for adoption:

1. That three general sessions be held in the afternoons from 2:00 to 5:00 on Monday, Tuesday and Wednesday—one session on medicine, one on surgery, and one on obstetrics, gynecology and pediatrics—the programs for these general sessions to be subjects of wide appeal.

2. That the mornings of Monday and Wednesday be devoted to individual section meetings of the remaining fifteen sections; and that these fifteen sections be privileged to meet every year if they so desire.

MEDICAL-SURGICAL PLAN RESOLUTION

The following resolution was approved by the Board of Trustees and is referred to the House of Delegates:

"RESOLVED, that in cases of otherwise eligible services rendered enrolled Subscribers and dependents by physicians employed by incorporated clinics or groups, and subject to approval of this policy by the Department of Banking and Insurance and the State Medical Society, the Plan reimburse such Subscribers upon proper proof of rendition of and payment for eligible services, up to the maximum payment provided in the Schedule of Payments, toward, but not in excess of the amount actually paid by the Eligible Person for such services;

"FURTHER RESOLVED, that it be deemed proper proof if (1) the receipted bill submitted clearly indicates the nature and extent of professional services rendered and that the condition for which treatment was rendered is eligible, or (2) a narrative report or other statement signed by the physician who rendered the services is submitted."

REPORT OF THE NOMINATING COMMITTEE

Office	*Term*	*Nominee*
President-Elect	1 year	Dr. Elton W. Lance
1st Vice-President	1 year	Dr. Vincent P. Butler
2nd Vice-President	1 year	Dr. Lewis C. Fritts
Secretary	1 year	Dr. Marcus H. Greifinger
Treasurer	1 year	Dr. Jesse McCall
Trustees:		
1st District	3 years	Dr. William F. Costello
2nd District	3 years	Dr. Luke A. Mulligan
3rd District	3 years	Dr. William C. Wilentz
11th Trustee	3 years	Dr. David B. Allman
Councilors:		
2nd District	3 years	Dr. Joseph M. Keating
5th District	3 years	Dr. Isaac N. Patterson
A.M.A. Delegates and Alternates:		
Delegate	2 years	Dr. Aldrich C. Crowe
Alternate	2 years	Dr. Albert B. Kump
Delegate	2 years	Dr. William F. Costello
Alternate	2 years	Dr. Walter F. Phelan

Delegates and Alternates to Other States:		
New York—Delegate	1 year	Dr. Harrold A. Murray
Alternate	1 year	Dr. William F. Costello
Connecticut—Delegate	1 year	Dr. C. Byron Blaisdell
Alternate	1 year	Dr. Blackwell Sawyer
Standing Committees:		
Finance and Budget	3 years	Dr. Joseph I. Echikson
Publication	3 years	Dr. Ralph M. L. Buchanan

REFERENCE COMMITTEES

REFERENCE COMMITTEE "A"

Albert B. Kump, M.D., Chairman

Reference Committee "A" met on May 18, 1953, with the following members present: Dr. Albert B. Kump, Dr. G. Barton Barlow, Dr. Nicholas A. Antonius, Dr. Earl DeW. Stage, and Dr. Robert A. Weinstein.

The report of the President was carefully studied. It is complete in every detail and the accomplishments of the President and his administration are deserving of sincere commendation. The establishment of liaison among professional and non-professional groups is meritorious and their continuance and expansion is anticipated. The service rendered has been without personal regard and in the interest of The Medical Society of New Jersey.

The report of the Board of Trustees reflects the loyal consideration of this body. The establishment of a Committee on Research, the Society exhibit, the Health Service Survey, the membership plaque, the revised program of the Legislative Committee, the sponsoring of a dinner signalizing the enrollment of the one millionth subscriber under the Medical-Surgical Plan of New Jersey, as well as supporting the American Medical Education Foundation indicate strides toward good public relations and sound medical practice.

The report of the Secretary receives the approval of the committee, with especial credit regarding the completion and issuance of the Membership Directory. The newly established Physicians Placement Service has functioned well from its recent inception.

Regarding membership we reiterate the suggestion that county societies be cognizant of the importance of keeping membership in good standing at all times.

The report of the Judicial Council indicates both function and deliberation. The chairman and members are to be congratulated on their handling of their delicate problems.

The committee approves the report of the Executive Officer, and we wish to commend him for the diligence and skill with which he has conducted the affairs of The Medical Society of New Jersey.

The Gloucester County Resolution was tabled by the unanimous decision of the committee and it is recommended it be referred to the Board of Trustees.

REFERENCE COMMITTEE "B"

Marcus H. Greifinger, M.D., Chairman

Reference Committee "B" met with all members present and considered the report of the Treasurer, the report of the Finance and Budget Committee and the report of the Publication Committee.

All items in the report of the Treasurer were carefully examined by the individual members of the committee. The administration of the office of the Treasurer is obviously a very competent one and the Reference Committee recommends to the House of Delegates a vote of appreciation to Dr. Jesse McCall for his efforts in the discharge of the duties of his office.

The report of the Finance and Budget Committee was then studied. Several questions propounded by members of the committee and visitors were satisfactorily answered and explained by Dr. Allman, chairman of the Finance and Budget Committee. The two recommendations made by the Finance and Budget Committee were then approved. The first recommendation was that the budget in the amount of $144,143.00 be approved.

The second recommendation was that the per capita assessment for 1954 be $25.00.

Your Reference Committee commends highly the work of the Administrative Secretary in compiling and administering the budget for previous years and the current year.

The report of the Publication Committee as printed in THE JOURNAL was then approved. The committee wishes to commend the Publication Committee and the Editor for the outstanding character of our monthly publication. The committee also wishes to commend the Assistant Editor for meticulous attention to details of publishing and distributing THE JOURNAL.

REFERENCE COMMITTEE "C"

Herschel S. Murphy, M.D., Chairman

1. *Medical Service Administration of New Jersey*

The committee has studied the report of Medical Service Administration of New Jersey. We wish to commend them on a difficult and painstaking job during the past year.

We approve of the following nominations on the Board of Governors of Medical Service Administration of New Jersey for the coming year:

Harry N. Comando, M.D.; William F. Costello, M.D.; Arthur W. Lunn; Royal A. Schaaf, M.D.; Rudolph C. Schretzmann, M.D.; Edward W. Sprague, M.D.; John S. Thompson; Thomas J. White, M.D.

2. *Special Committee on Medical Research*

The report of the Special Committee on Medical Research has been studied. We feel they are doing an excellent job and are to be commended upon their program.

3. *Special Committee on Medical-Dental School*

We have studied the annual report of the Special Committee on the Medical-Dental School. We wish to approve the report of this committee and commend them on a job well done.

4. *Medical-Surgical Plan of New Jersey*

Reference Committee "C" and many interested members of The Medical Society of New Jersey spent almost all day Monday, May 18, and far into the night studying the various resolutions and committee reports assigned to it. Needless to say, the Medical-Surgical Plan, in its various ramifications engaged most of our attention for the day.

The Committee studied both the regular and supplemental reports of Medical-Surgical Plan of New Jersey.

The Committee feels that the Trustees of Medical-Surgical Plan should be commended for the excellent job which they have done during the past year. There are, naturally, differences of opinion among various groups of physicians over the state and in the various fields of medicine. This will always be the case.

The Committee approves the proposed new contract as presented in principle with the following comments:

Maternity Benefits—We approve of the proposed change in Maternity Benefits in the new contract but recommend that the Board of Trustees of Medical-Surgical Plan give close attention to the need of compensating for trial labor or pre-operative hospital care the family physician who has required the help of a consulting operator in an operative delivery, whether it be forceps or caesarean.

Surgical Benefits—We approve the proposals for the expansion of surgical benefits. We recommend, however, that for the present, Plan payment of operative procedures outside of hospitals be confined to surgical treatments of an emergency nature only. We recommend that further study be given to the problem of payment for emergency x-rays required in the treatment of accidental injuries outside of hospital.

Consultations—The Committee approves with reluctance the proposal to eliminate payment for consultations and recommends that The Medical Society of New Jersey establish qualifying criteria for the recognition of specialist consultants to whom payment may be made by the Plan in the future if feasible.

Sales Promotion—In the course of the hearings before the Committee it became apparent that limitations of coverage of contract have not been adequately stressed by the sales representatives of the Plan in some localities. We recommend that the Board of Trustees of Medical-Surgical Plan be asked to take appropriate steps, in cooperation with Hospital Service Plan, to correct this situation.

Hospital Care for Caesarean Sections—We recommend that, through proper channels, Hospital Service Plan of New Jersey be requested to make available hospital care for caesarean sections under the same provisions as for other abdominal surgery.

Resolution on Incorporated Clinics or Groups — The Committee studied the resolution relating to the pratice of medicine by physicians employed by incorporated clinics or groups, and approves the reimbursement by Medical-Surgical Plan to subscribers for payment made by them upon proper proof of professional services rendered.

Bergen County Resolution — The Committee studied the resolution from the Bergen County Medical Society regarding the apportionment of available benefits in instances in which more than one physician participates in the care and treatment of a surgical case. We realize that there is merit to this proposal and we feel that such payment can be arranged in an ethical manner which would neither be "fee splitting" nor would lead to such an abuse.

The Committee would like to call the attention of participating physicians to the fact that the Medical-Surgical Plan subscription contract provides that assistant's fees are not an eligible service, and we would point out to the participating physician who assists in a surgical operation that he may bill the patient directly for his assistance fee.

We feel, however, that this problem is such an important and controversial one that it should be referred to the Board of Trustees of The Medical Society of New Jersey with the recommendation that a committee be appointed comprising a representative of each component county medical society to study this problem during the coming year and to make definite recommendations to the Board of Trustees for presentation to the House of Delegates at its next annual meeting.

Mercer County Resolution—The Committee studied the Mercer County resolution at considerable length. In view of the fact that the proposed new contract will be based on a combined gross income of subscriber and spouse of $5,000 or less for service benefits, and indemnity benefits for subscriber and spouse with joint income of more than $5,000, we feel that the new contract should be given sufficient time for adequate trial. We, therefore, disapprove the Mercer County resolution at this time.

Board of Trustees—The Committee approves the nomination of the following individuals as Trustees of Medical-Surgical Plan of New Jersey for the coming year: (See page 34)

REFERENCE COMMITTEE "D"

C. Archie Crandell, M.D., Chairman

Reference Committee "D" met on Monday morning, May 18, 1953 with all members of the committee present.

The committee had for consideration the reports

of the Medical Defense and Insurance Committee, the Advisory Committee to the Woman's Auxiliary, the Medical Education Committee, and that of the New Jersey State Board of Medical Examiners.

The Reference Committee received and considered the report of the Committee on Medical Defense and Insurance. It favored the recommendations of the committee, including the continuance of Faulhaber and Heard, Inc. as the official broker for The Medical Society of New Jersey.

The Reference Committee reviewed the report of the Advisory Committee to the Woman's Auxiliary and favored that the report be received and the Auxiliary congratulated on its work.

The report of the Committee on Medical Education was received and the committee favors the continuance of this committee in its graduate educational efforts.

The report of the New Jersey State Board of Medical Examiners is approved as received.

REFERENCE COMMITTEE "E"

Robert N. Bowen, M.D., Chairman

Reference Committee "E" met on May 18, 1953, with all members present.

Reports of the Welfare Committee and the Subcommittees of the Welfare Committee were all approved with the exception of Recommendation 3 of the Public Relations Committee:

> "The employment of a full-time public relations officer as soon as feasible is urged,"

which recommendation was felt by the committee to belong within the purview of the Board of Trustees and is so duly referred for further action.

The committee considered the reports of the Advisory Committees to the Subcommittees and unanimously approved all with the exception of the following sections of the report of the Committee on Pharmaceutical Problems, urging that

(a) THE JOURNAL of The Medical Society of New Jersey follow the procedure of the Council on Pharmacy and Chemistry of the American Medical Association regarding advertising and promoting of drug products.

(b) The Advisory Committee on Pharmaceutical Problems and the President of The Medical Society of New Jersey be consulted in special instances when it is planning to authorize advertising of non-council accepted products.

(c) Proof sheets of such advertising be sent to every member of the Advisory Committee for approval, reply to be given within 72 hours.

This was disapproved in toto, the unanimous opinion of the committee being that paragraph (a) was redundant and paragraphs (b) and (c), if followed, would make the publication of THE JOURNAL impractical.

The recommendations of the Board of Trustees endorsing methods of telephonic listings were unanimously approved.

The Bergen County resolution relative to coverage provisions for disability, death, medical and hospital benefits for civil defense volunteers was considered. The committee recommends that it be referred to the Board of Trustees for further study, but questions the advisability of adoption of said resolution.

The committee unanimously approved the Union County resolution regarding the United States Government engaging in any business, professional, commercial, financial or industrial enterprise except as specified in the Constitution.

The committee unanimously and whole-heartedly approved the resolution of the Essex County Medical Society regarding revisions of the Internal Revenue Code to eliminate arbitrary discrimination against self-employed and professional men with respect to retirement benefits.

REFERENCE COMMITTEE ON CONSTITUTION AND BY-LAWS

Morris H. Saffron, M.D., Chairman

This Committee met on May 18, 1953 and considered the matter referred to it. The Committee approves and recommends the amendment to Article VI of the Constitution and By-Laws. The Reference Committee on Constitution and By-Laws recommends the adoption of this report as a whole.

ARTICLE VI—BOARD OF TRUSTEES

The Board of Trustees shall be the executive body, and shall be composed of the Immediate Past-President, President, President-Elect, two (2) Vice-Presidents, Secretary and Treasurer (by virtue of their offices) and eleven (11) members at least two (2) from each judicial district (delete "who shall be elected as follows:") substitute: *and who shall be elected for a term of three years, such term to commence upon expiration of the term of the then incumbent.*

From and after May 21, 1953, any member may be elected a trustee for a maximum of three full terms, provided, however, that if the first two elected terms are successive, there shall be a lapse of one year between expiration of the second and commencement of the third term. The term of any trustee commencing prior to May 21, 1953, shall not be included in the limitation of three elected terms.

REFERENCE COMMITTEE ON MISCELLANEOUS BUSINESS

John P. Coughlin, M. D., Chairman

The Reference Committee met in session and all members were present.

The Reference Committee approved the report of the Annual Meeting Committee and its recommendation:

That the 188th annual meeting of The Medical

Society of New Jersey be held at Haddon Hall on Sunday, Monday, Tuesday and Wednesday, May 16th, 17th, 18th and 19th, 1954.

The report of the Scientific Program Committee was approved.

The following recommendations from the Board of Trustees were approved:

(a) That three general sessions be held in the afternoons from 2:00 to 5:00 on Monday, Tuesday and Wednesday—one session on medicine, one on surgery, and one on obstetrics, gynecology, and pediatrics—the programs for these general sessions to be subjects of wide appeal.

(b) That the mornings of Monday and Wednesday be devoted to individual section meetings of the remaining fifteen sections; and that these fifteen sections be privileged to meet every year if they so desire.

The report of the Scientific Exhibit Committee was approved.

The Reference Committee approved the resolution from Bergen County on Civil Defense:

(a) That The Medical Society of New Jersey formulate an Emergency Medical Service Civil Defense Committee.

(b) That this Commmittee—so formed—initiate a program for the guidance of all component county medical societies in this sphere of medical civil defense.

REFERENCE COMMITTEE ON RESOLUTIONS AND MEMORIALS

John F. Kustrup, M.D., Chairman

The annual report of the Committee on Honorary Membership was approved by this Reference Committee after considerable discussion, not because of the man's individual qualifications but because of the fact that he represented a symbol for psychologists who may use this appointment to honorary membership as a symbol for their own political advantage. Because of Dr. Lloyd N. Yepsen's excellent character and his achievement and ideals, the Committee approved his recommendation for honorary membership.

The resolution from the Union County Medical Society to the House of Delegates of The Medical Society of New Jersey, except for Section 4 of their resolution, was withdrawn. Section 4 only is recommended by the Committee. This report was accepted after an explanation by Dr. George Lull with reference to items covered in this resolution.

The nominations for emeritus membership were approved.

The resolution from Essex County Medical Society to the House of Delegates of The Medical Society of New Jersey was adopted and recommended for approval.

The Hudson County resolution received approval of the Reference Committee on Resolutions and Memorials.

THE EXHIBITS COMMITTEE

Asher Yaguda, M.D., Chairman

AWARDS

Class I. Scientific exhibits of individual investigations, judged on the basis of originality and excellence of presentation.

The exhibits which qualified under this designation were so numerous that the Awards Committee had a very difficult time in arriving at its decisions.

1st Award: Mitral Commissurotomy — Evaluation and Results; Robert P. Glover, M.D., O. Henry Hanton, M.D., Thomas J. E. O'Neill, M.D., Louis A. Soloff, M.D., Thoracic Surgical Service of Episcopal, Hahnemann and Lankenau Hospitals, Philadelphia, Pa.

2nd Award: Tumors of the Hands and Feet; Robert J. Booher, M.D., George T. Pack, M.D.

3rd Award: Sigmoidoscopy; Analysis of 4,500 Consecutive Cases; Paul L. Shallenberger, M.D., Peter Fisher, M.D.

Honorable Mention: A Simplified Uroflowmeter; William M. Drake, Jr., M.D., Camden, N. J.

Class II. New Jersey Exhibitors.

1st Award: Hepatic Abnormalities in Congestive Heart Failure; Thomas J. White, M.D., Carroll M. Leevy, M.D., Anthony M. Brusca, M.D., Angelo M. Gnassi, M.D., Felix Traugott.

2nd Award: Porphyria—Detection and Management; Louis F. Albright, M.D., Frederick C. Steller, M.D.

3rd Award: Esophageal Atresia; Hugh B. Lynn, M.D.

Honorable Mention: Cancer of Mouth, Pharynx and Upper Esophagus; Edgar P. Cardwell, M.D., Samuel A. Goldberg, M.D.

GENERAL SESSION

Mcnday Evening, May 18, 1953

The General Session of The Medical Society of New Jersey convened in Haddon Hall, Atlantic City, at 8:15 p.m., Dr. Harrold A. Murray, President of the Society, presiding.

Dr. Murray: I will call this meeting to order, please.

We will have the soloist sing the National Anthem. (Miss Ruth Stein.)

Dr. Murray: Now we will have the invocation by the Reverend Harvey Bennett of the First Presbyterian Church of Atlantic City.

Reverend Bennett gave the invocation.

Dr. Murray: Just one little disappointment tonight. Last year at this stage of the program Dr. Allman had the Mayor of Atlantic City come present the key to Dr. Johnsen. Tonight I don't get a key; I don't know why, but I'm glad I don't, in a way, because it certainly got Dr. Johnsen in a lot of trouble. (Laughter) He opened too many doors, I guess.

Sometime ago, in fact all during the year our Board of Trustees felt the need for contributing to the American Medical Education Foundation. I might say as in everything else we do, we had to have the approval of this Board before we could grant funds.

We were in Washington sometime ago and we met General Lull—you know, General Lull is the American Medical Association; he is the secretary and the general manager of the American Medical Association, and when we asked him, Dave Allman and I, if he would come over here and accept the check that we are going to give him tonight, he replied, "I'll go anywhere for $25,000." (Laughter)

So he is here tonight and we are very happy to have him with us. It is the first time in several years that he has been here, and I am sure that he lends dignity to the occasion and he will be very happy, I know, to receive these much needed funds.

I shall read to you now, so I do not get lost anywhere, the complete message that the Board of Trustees drew up for this occasion.

The Medical Society of New Jersey glories in the record of 187 years of devoted service to the ideals of medicine and the good of mankind. Our Society has witnessed the struggle for, and attainment of, freedom on the part of the people of this great country. Above all else it desires to preserve that freedom from encroachment or infringement, especially as regards training for and the practice of medicine.

The Medical Society of New Jersey vigorously allies itself with the American Medical Education Foundation in its efforts to achieve economic solvency and therefore continued freedom for the medical schools of the United States.

Accordingly, as President, it is my happy privilege to present, in the name of The Medical Society of New Jersey, this gift of $25,000 to the American Medical Education Foundation with the request that the money be assigned only to those medical schools in this country in which students from New Jersey are currently in attendance, and pro-rated, as far as possible, in direct proportion to the number of New Jersey students on the official roster of each school.

And now, General, it is my happy privilege, as President of the Society, to present to you this check for $25,000. (Applause)

Dr. George F. Lull: Dr. Murray, distinguished guests, ladies and gentlemen: I had a long speech written out, but I left it up in my room. (Laughter) But no matter what I would say it would simply mean thanks to The Medical Society of New Jersey.

I imagine from the way in which this gift was donated that there will be many deans in this country who will be searching their records to try to prove that some of their students come, either directly or indirectly, from New Jersey. (Laughter)

This $25,000 is a lot of money to an individual, but the way the cost of medical education has risen in the last few years, it has to be spread rather thin to mean anything.

The American Medical Association will have raised this year from its members almost a million dollars to give to the deans. The deans tell us that when you put a check for several thousand dollars on their desk to use as they see fit, it means a great deal to them, even if it isn't up in the big money, as many deans would like to have it, because their problems are complex. They have many problems in the way of equipment and buildings and paying salaries.

Now, this money has been raised in its entirety from doctors; when I say in its entirety, there may be one or two hundred dollars from individuals who are not physicians. Some of our people, who are not physicians, at A.M.A. headquarters have donated to this fund.

Every cent collected goes to the medical schools. The American Medical Association carries all the overhead. We pay a full time executive to run this foundation. We pay the salary of the clerks; we pay the printing, the

promotion materials; we furnish him with an office. All the cost involved in the collection of this money is therefore borne by the American Medical Association.

This has been a very great thing for American medicine. It has not been good enough because there are many people in the country who could well afford to give a small amount each year to medical education, who have given only ten, fifteen or twenty-five dollars, something like that. There are many of them who have given more than that, but it hasn't been spread around enough.

This brings New Jersey, of course, into the fold one hundred per cent. And in addition to utilizing the $25,000, the example set by the state of New Jersey is an extremely valuable one, as this can be used in talking to people from other states.

Dr. Murray, I know that I express to you, on behalf of the Trustees of the American Medical Education Foundation, their sincere thanks. The Trustees will meet the first week in June at the American Medical Association convention and you will have a more permanent and fitting formal thank-you letter from them at that time.

DR. MURRAY: Thank you, General. (Applause)

We will now have some musical selections by Harold Ferrin and Ensemble.

Selection.

The next is a very important part of our program. On this occasion we will have the privilege of hearing the inaugural address of our President-Elect.

I'm sure I do not need to introduce to you Henry Decker. Many of us have known and loved him for not too many years because he isn't too old. He is affectionately called the Great White Father, not only by his family but by the many people in his county society and our state society that know and love him.

I was going to say some things to get back at him tonight because he has introduced me on different occasions, but I don't think I will, because I know he really has a very serious message to give you and we are all going to be very happy and pleased to hear it.

You know, Henry Decker has done many things for The Medical Society of New Jersey. He has a lot of foresight, a lot of experience, and I am sure that he is going to be one of our outstanding presidents.

It gives me a great deal of pleasure now to introduce to you the President-Elect of our Medical Society, Dr. Henry B. Decker of Camden. Doctor Decker.

The audience arose and applauded.

DR. DECKER: Dr. Murray, Dr. Pan, General Lull, Dr. Allman, guests and members of The Medical Society of New Jersey: I appreciate Dr. Murray's introduction very much because I was very fearful of what he might say and what he could have said.

Two centuries ago less thirteen years, our medical forebears met in the Bulls Head Tavern in New Brunswick and launched a vessel. Sturdily built, carefully rigged, and well-founded she has carried our medical fortunes successfully down to the present.

As was the custom with wooden ships, they set up a figurehead and ordained that this symbol should, with proper ceremony, be changed each year. The ancient Phoenicians, skillful traders and adventurous sailors, were the first to use a figurehead on their ships. For this purpose they selected a horses' head, and it is not recorded that they ever used any other portion of the horse. (Laughter)

The inanimate figurehead of the sailing ship was supposed to avert the wrath of the gods and to guide the ship safely to harbour. May the articulate figurehead of our Society likewise avert the Divine wrath and point toward some of the goals to be attempted.

As you know, New Jersey consists of two distinct communities. The division line is about the Rancocas River. Above this line is concentrated most of the wealth and industry and activity of the state. South of the Rancocas, through which the Mason-Dixon Line may be extended, is a most delightful part of the world. (Laughter and applause) Quiet, even sleepy, easy going, largely agricultural, with just enough industry, a pleasing place to live, and the most pleasant place in the world to practice medicine.

The increasing industrialization of the lower Delaware Valley will, in the near future, produce changes in our way of life. We are not sure that we will like these changes. We are sure that we cannot stop them.

Because of these changes there will be a population increase with concomitant demand for medical services. Our Society will increase in size. It may have to take on additional, now unforeseen, functions. We should take thought and prepare ourselves. Our present headquarters in Trenton, used jointly by our Society and the Mercer County Component Society, is presently inadequate. The building, a former residence, cannot be excelled for its original purpose. However, it adapts itself poorly to the activities of an expanding business office. Might it not be wise to plan now for the erection of an addition at the back of our present building? This structure should have an auditorium, large enough to seat 500 people on the first floor, and on the upper floors well-arranged office space.

With such a building the House of Delegates could meet more frequently and expedite the business of the Society. It is becoming increasingly apparent that a more rapid crystallization of opinion in medical affairs is necessary. This may result from the adoption of the new constitution

in New Jersey with the subsequent court reorganization. We know of no lightning rod that will shield us from the bolts of energy that arise in our Supreme Court.

Some few years ago our society attempted to solve the problem of medical care costs by setting up a free insurance plan. Within its limits this has been eminently successful. It is a service plan, operated on a non-profit basis, governed by a board nominated by this Society.

Might it not be worthwhile, from all possible approaches, to study objectively this plan, determine its weak and strong points, and arrive at a final decision whether or not we desire to remain in the insurance business?

The problem of medical education becomes increasingly important. Several years ago, Dr. Royal Schaaf introduced a resolution before this body requesting Governor Driscoll to appoint a commission to study the need for a medical school in New Jersey. This commission's report was published some two years ago. It established the need for a medical school, indicated the best location, and a method of financing. You must remember that this commission was appointed, at your request, by the Governor. The composition of the commission was delineated in the resolution. Since the commission's report, there have been at least three other surveys made by medical school deans or educational committees, each accompanied by suitable publicity and fanfare and arriving at various conclusions.

We are all convinced that New Jersey needs at least one medical school. The state in which we take pride should willingly support such a school. It is my personal opinion that we have far too few medical schools. The discipline of medicine is most soul-satisfying.

We produce barely enough practitioners of medicine, not nearly enough teachers, and far too few research students. We should have, in New Jersey, a medical institution that is not a trade school, taking advantage of a set of already erected buildings or the clinical material of a dense population, but a habitation for learning, for contemplation, and the study and care of the ailments of man.

A criticism leveled against the medical profession is that on matters other than medicine there is little unity of thought or expression. This is a fair criticism. However, one must remember that physicians are trained to be individuals. It might be well for us occasionally to re-read John Donne's sermon which begins—"No man is an island entire of itself, but every man is a piece of the continent, a part of the main; if a clod be washed away by the sea, Europe is the less, as well as if a promontory were, as well as if a manor of thy friends or of thine own were; any man's death diminishes me: Because I am involved in mankind: And therefore never send to know for whom the bell tolls; it tolls for thee." When we unwittingly diminish our medical organization, we diminish ourselves.

It is customary on this occasion for the incoming president to outline a program. This we will avoid. The program outlined by my predecessor, Dr. Harrold Murray, is to be continued. We will live from day to day and attempt, with your help, to solve the problems as they arise.

When the world was very young and the gods more intimate with man, certain difficulties arose. A time arrived when men decided to storm Mount Olympus and partake of the ambrosia and nectar reserved for the gods. A truce was arranged and around the bargaining table a peace achieved.

The gods decreed that each mortal, whatever his degree, during his life would be entitled to one shining hour. This might take many forms, might last for varying periods; but the mortal would know when it came, and would cherish it in his memory throughout life.

May I thank you for aiding the gods in giving me my shining hour.

The audience arose and applauded.

DR. MURRAY: I might read at this particular time, because I think it is very apropos, a telegram I received just a little while ago. It will bear out some of the things that Dr. Decker has in store for him—many of the things that we started this year and hope to finish or help complete during his administration. It was sent to me as president.

"Permit me to convey to you and through you to the physicians assembled in Atlantic City for your 187th Annual Meeting the congratulations and best wishes of the 2,050 members of the New Jersey Pharmaceutical Association. It has been a pleasure to work with you for the past year in our joint professional endeavors and I can vouch for the fact that the medical profession enjoys the respect and full confidence of the people of our state.

Particularly outstanding during your administration has been the progress made towards providing adequate public health facilities and adequate number of physicians through your Physicians' Placement Bureau; increasing the number and availability of hospital beds; the stepping up of medical research; furnishing around-the-clock services for the acutely ill; and the care of the chronically ill. Noteworthy also has been your success in providing voluntary insurance for medical costs; impressive is the fact that your Medical-Surgical Plan has enrolled its millionth subscriber this year —attesting to the effectiveness of this voluntary answer to compulsory insurance.

Under the leadership of your Society I am confident that the allied health professions will continue their progress toward better health service to the people of our state. New Jersey Pharmaceutical Association, Ira R. Schwartz, President.
(Applause)

We will now have a solo by Miss Ruth Stein.

Miss Ruth Stein sang a solo.

DR. MURRAY: The guest speaker of the evening will be Dr. Stephen C. Y. Pan, Director of the Institute of Far Eastern Studies of Seton Hall University.

Dr. Pan's subject will be, "The Place of the Far East in the future of America."

Dr. Pan was formerly managing editor of "The China Monthly," a magazine in English about China and her relations with America. He was editor and director of the "You-Su-Pow," one of China's outstanding papers. He has held the position of vice-director of the Institute of Chinese Culture in Washington, D. C. At the Dumbarton Oaks Conference in 1944, Dr. Pan was technical consultant to the Chinese delegation. In 1946 he was technical expert on the staff of the Chinese delegation to the United Nations General Assembly, and in 1949, adviser to the Chinese delegation, United Nations General Assembly. He was a delegate to the Chinese delegation for drafting the Chinese constitution in 1946; a member of the Standing Committee of the People's Political Council. He has been a member of the Legislative Congress of China since 1948. Dr. Pan is the author of two books in English which have been well received: *American Diplomacy Concerning Manchuria,* and *China Fights On.*

It is indeed an extreme pleasure for me to present to you now an authority on the Far East, Dr. Stephen Pan.

(Applause.)

DR. STEPHEN C. Y. PAN: Dr. Murray, Dr. Decker, Rev. Bennett, Dr. Lull, Dr. Allman, members and friends of The Medical Society of New Jersey, ladies and gentlemen:

It is indeed an honor and pleasure for me to be invited to address this distinguished meeting of The Medical Society of New Jersey, which is the oldest state medical society in the western hemisphere.

Being a layman in the field of medicine, I rather hesitate to address you, authorities on medicine, on any subject which is related to medicine itself.

Although I personally have always been interested in medicine, I regret that I did not receive any degree in medicine.

Please let me tell you a personal story. When I was residing in Washington, D. C., my name was listed in the telephone directory as Dr. Stephen Pan. On numerous occasions I was called late in the night and early in the morning to come to give some medical aid, and my reply was this: "Sorry, you are calling the wrong kind of doctor, because I can be of no help to you."

At this time, I am inclined to think that I am also the wrong kind of a doctor because thousands and thousands of refugees in China, Korea, French Indo-China, Malaya, and other places in the Far East need medical care and I cannot give them my service, and that is the reason I am still thinking that I am the wrong kind of doctor.

According to the Chinese conception, a physician is this—let me quote a Chinese proverb which I presume all of you can understand. In English it means: "If you cannot become a good physician, you had better become a good statesman"; because we say the physician can save the human life and the statesman can only serve the material interests of a person or some human being.

It is thus not infrequent that in China many physicians are simultaneously statesmen, and statesmen by profession are physicians.

One of the most outstanding examples is the case of Dr. Sun-Yat-Sen, father of the Republic of China. He himself was a physician by profession and he has been considered the greatest statesman of modern China.

You may also be interested to know that in the Chinese Legislature, of which I was a member, there were many physicians represented because according to the Chinese constitution and according to the electoral laws of China, professions such as physicians and lawyers are represented in the Chinese Congress.

Members and friends of The Medical Society of New Jersey, you have chosen a great profession, a profession that can serve human interests very well. Furthermore, your interest in the general welfare of America and the world is shown by choosing the topic for the general discussion of your annual meeting, "America Faces Forward."

Dr. Murray and also your president-elect, as well as the Board of Trustees of this great Society had the far-sightedness to select a topic entitled "The Place of the Far East in the Future of America," for discussion this evening.

I can remember when the Far East had very little place in America some years ago. For instance, when the Japanese first invaded Manchuria, in 1931, it hardly constituted headline news in American newspapers. Even when the Japanese aggression spread all over China from 1937 to 1940 or 1941, many people in this country still seemed to be rather unconcerned about what was taking place in China. As late as 1949, when the Chinese Communist forces were about to take over the Chinese mainland, quite a number of Americans still seemed to be rather unaffected by the events in China.

Only with the outbreak of the Korean War, has the whole nation been aroused by the barbarous actions of Communist aggression in Korea. Ever since that time, the United States as well as the whole free world, have been very much concerned in what is taking place in the Far East.

The amazing development of modern science has been a major factor in bringing the Far East closer to the United States than ever before.

Of course, the Far East is not very far. Let me tell you one of my personal stories. It was some years ago when I came over from Shanghai to Seattle. I left Shanghai on Saturday morning at about 6 o'clock and I arrived in Seattle on the same day at 11 o'clock. I still had time to take lunch in Seattle on the same Saturday. After all, the Far East is not very far.

That was some years ago, in 1947, and I imagine that with the increasing speed of airplanes you can fly from China to San Francisco and arrive several

hours ahead of the time you actually start because of the difference in time. (Laughter)

It would be unnecessary for me to emphasize how important the Far East is in relation to the United States of America. It would also be superfluous for me to stress the importance of understanding the present problems of the Far East to such a group as this. However, I like to make it very clear that I have no intention of entering into the debatable question of whether it should be Asia or Europe first in the formulation of American national foreign policy. To me, we are all living in one world with friendly and unfriendly neighbors.

A foremost American authority on Far Eastern problems is of the opinion that:

> "The issues are global, and so interlocked that to consider the problems of one sector oblivious to those of another is but to court disaster for the whole. While Asia is commonly referred to as the gateway to Europe, it is no less true that Europe is the gateway to Asia and the broad influence of the one cannot fail to have its impact upon the other."

In more definite terms, the same authority states: "The Communist threat is a global one. Its successful advance in one sector threatens the destruction of every other sector. You cannot appease or otherwise surrender to communism in Asia without simultaneously undermining our efforts to halt its advance in Europe."

The United States today is certainly the "arsenal of democracy," and the leader of the "free world," while the Soviet Union is the "catalyst of Communism," and the "Iron Curtain world."

The policy and the strategy of the Communists is certainly not national, sectional, or regional, but global in character. The free world, therefore, is compelled to adopt an overall policy to cope with the Communist world strategy.

Unlike some Western European nations, whose interests are mainly confined in Europe, the United States is bounded by the Atlantic Ocean on the east, and the Pacific Ocean on the west. Therefore, geography has made this United States unable to neglect her security on either side of these two great oceans. By geography again, she has become the leader of the free world in challenging the Communist world.

Since Dr. Murray has assigned me the topic, "The Far East in the Future of America," in order to understand this problem, let us remember that the future is the outgrowth of the present and the present paves the way for its future.

Therefore, perhaps it is necessary for us to make a very brief survey of the present situation in the Far East. First of all, let us talk about Korea, which I presume all of you are interested in because I presume that some of you must have some relatives or friends who are fighting in Korea.

The Korean situation is a very peculiar one. To the boys who are fighting in Korea it certainly means war in its fullest sense. But to some politicians, it is called a "police action" or a "phony war," and some call it a war not in earnest because neither side of the policing forces seems to want to win a clear-cut victory in Korea.

I was asked by a reporter this afternoon why both belligerents do not want to have a clear-cut victory in Korea and my answer was; first of all because the Soviet Union is not ready to fight a global war and she wants, by all means, to avoid being entangled with the United States; secondly, it is due to the fact that the United States, including the Truman and Eisenhower administrations, is not willing to have a showdown in the Far East.

Although the United States Congress and the United Nations have officially proclaimed the Communist Chinese as an aggressor in Korea, even the United Nations General Assembly on December 7th, 1950 resolved: "All appropriate steps must be taken to insure conditions of stability throughout Korea," by the members of the United Nations. Yet, neither the United States nor the United Nations is willing to punish the aggressor's forces where they stopped. In other words, they will not and they do not want to bomb Manchuria where the Chinese Communist forces start to kill the G. I.'s and the U. N. forces in Korea.

It is really a paradox; it is a very peculiar form of war, a war without decision, a war of stalemate which has been dragged on for almost three years.

Now, the so-called Korean truce talks have been dragging on for more than 23 months, yet there is no clear indication that they will be ended.

The latest development is that the United States and the United Nations are willing to accept the Communist suggestion to consider Poland, Czechoslovakia, India, Sweden and Switzerland as the members of the neutral commission.

Now, ladies and gentlemen, you can answer it for yourself. Is Poland a neutral country? And your answer certainly is clearly no. Is Czechoslovakia a neutral country? Certainly it is not, because both of them are Communist countries. Yet the U. N. negotiator has agreed to accept Poland and Czechoslovakia as members of the neutral commission.

How about India? Well, you know very well that only 2 or 3 days ago Mr. Nehru, the Prime Minister of India, told the Indian Parliament that the United States Government should accept the Communist terms for truce in India. I think that India has acted as the most powerful and the most arrogant authority for the cause of Communist China and Communist Korea, and certainly you don't have to study politics, you don't have to be a statesman, still you can tell what is the policy of India.

Now, India probably will act as chairman of the Neutral Commission. The United States Government, whether a Democratic or Republican Administration has agreed that there shall be no forced repatriation of the war prisoners.

Now, within these five members of the neutral nations, two are Communists, one is a champion for Communist causes. What can the rest do? And furthermore you must know that Sweden and Switzerland have already recognized Communist China.

Well, then, I really can't understand why the United States Government has accepted these five nations as neutral nations to decide the fate of the war prisoners. As a student of American diplomacy, as one who has read some books on American diplomacy, as one who has taught American diplomacy in several American universities, I must

confess that the more I study American diplomacy, the more I am an Egyptian doctor.

There is another thing in the war in Korea which is not generally known to the American public; the war is now being fought in Korea and of course, who suffers most? The Koreans themselves. Of course, next to the Koreans, the United States suffers tremendously. It is Korea and the United States which are bearing the burden of the war in Korea.

Korea has suffered more than one million civilian casualties, more than 300,000 war orphans, more than half a million war widows, more than 60 per cent of the manpower is now furnished by the Republic of Korea. The country the United States and the U. N. are fighting for, yet, to our surprise, the Republic of Korea has no representative in the so-called truce talks in Korea.

On the other hand, the Communists are very clever, perhaps I should use the word cagey. They utilize General Nam Il, the Communist leader as their spokesman and they let their secondary leader talk with the United Nations commander; yet the U. N. does not approve of having a Korean representative to represent Free Korea. This is the situation in Korea today.

There is no guarantee that a truce will ever be signed. There will be unification of Korea. Although the unification of Korea is the purpose of the United Nations and also the purpose of the United States, recently there has been some evidence of confusing thinking spread by the Secretary of State, though later denied by the White House, that the United States Government would be willing to accept a divided Korea either on the 38th parallel or at the narrow waist of Korea. Thus, even if a Korean truce should be signed, there will be no guarantee of unity, although this has been resolved by the United Nations General Assembly and recently reiterated by President Eisenhower.

However, there can be no such guarantee.

It should be noted that the Communists, whether Chinese, Korean, Japanese, or Russian, have never honored their formal treaties or agreements. While I shall not enumerate those agreements signed by the Communists and then broken, it is sufficient to call your attention to the fact that the Communist theory calls for world revolution, and world revolution to them means world domination. Communist teaching has been constantly reminding its comrades and followers that the end justifies the means. Thus they are inclined to adopt any means, fair or foul, to acquire their objectives.

Let us turn from Korea to another section of the Far East. Let us talk about French Indo-China, composed of Laos, Vietnam, and Cambodia.

The Chinese Communists, and the Russian Communists, while they are talking about peace with the United States and Great Britain and the other parts of the world, launch a drive in Laos. It is quite reasonable for the President of the United States and the Prime Minister of Canada in a joint statement on May 8, 1953 to declare: " . . . in Laos a new act of aggression has been committeed which might have serious consequences for Thailand and the whole of Southeast Asia. These developments in southeast Asia must cast doubt on Communist intentions."

According to reliable sources, the Chinese Communists have sent about 100,000 Red Chinese veterans of war in Korea to French Indo-China with some Russian advisers and have obtained some naval and air equipment from Hainan Island, which is the southmost island of China.

It is natural for the Korean ambassador to think that the Communist drive in Laos is another form of Communist tactics which has been used in Korea.

It is also natural for the Philippine Ambassador to say: "A Korean truce will not mean peace in the Orient. On the contrary, it will mean only a shift of Communist forces from one theatre of conflict to another."

Now, the situation in French Indo-China is no less serious than the situation in Korea, because French Indo-China is the gateway to Thailand, Burma and even down to Malaya. If and when the Communists control the whole region of French Indo-China, it will constitute the greatest threat of aggression since the Japanese defeat in 1945.

It has been reported that the Communist drive in Laos has been temporarily halted. I think this is still due to technical reasons, because the monsoon has already started and they will certainly again resume their drive as soon as circumstances allow them to do so.

Turning from Korea to French Indo-China, let us look at the overall picture in the Far East. What is the position in the Far East today? The United States, it is true, has signed a mutual security pact with Japan, with the Philippines, with Australia and New Zealand, but all this was signed in the form of bilateral agreements. There is no such pact which may be called a Pacific pact or an Asiatic pact in the form of a multi-lateral agreement, which is similar to the North Atlantic Treaty or NATO. In other words, if Japan is attacked by an aggressor, the Philippines are not obliged to help her but the United States is. Conversely it is true that if the Philippines are invaded or attacked, Japan is not bound to render her assistance, but the United States is bound by her agreement. Furthermore, while the United States and the United Nations are actually fighting for the Republic of Korea, yet, there is no pact or agreement between the United States of America and the Republic of Korea for mutual military assistance.

As to Free China, which is now temporarily located in Formosa, she has the largest military forces besides the American one in the Far East. The Government of Free China has repeatedly offered to fight in Korea. Unfortunately this offer of using Chinese troops in Korea has not been accepted by the United States Government. The only other Asiatic countries which have sent forces to help the United Nations in punishing the aggressor in Korea are the Philippines and Thailand.

The other Asiatic countries, such as India, Pakistan and Indonesia call themselves "neutralists" or "impartial observers."

In this country it has been said that the United States needs manpower and does not want too many American boys killed in Korea. Well, if that is the case, why not let the Chinese do their job?

We have a poem in Free China which is sung in Chinese: Give us your guns, save your sons, Well, to me, it makes some sense, but I do not know whether, "give us your guns and save your sons," will make any sense to the politicians in Washington. Yet, this is the general picture of the Far East as a whole.

As to Japan, the United States has already paid a terrific price for the defeat of the Japanese warlords. Since V-J Day, billions of dollars have been spent for the demilitarization and democratization of Japan. Though the peace treaty with Japan and the mutual security pact between Japan and the United States was signed in September, 1951, it sems to be the intention of the United States to build up Japan in order to bar further Russian aggression from Sakhalin and the Kurile Islands, which were given to the Soviet Union by the Yalta agreement of February, 1945.

As a result of the Yalta agreement, the Prime Minister of Japan told the Japanese Conference in San Francisco in September, 1951, that Soviet forces are within 4 miles of Japanese territory. It is also true that this agreement made Manchuria and Korea a prey to Communist strategy in the process of conquering Asia.

Recent reliable information has indicated that the Soviet Union has been building a tunnel connecting Siberia and the Kurile Islands and it has been reported that the tunnel is about to be completed. Now, what is the purpose behind it, I don't know.

Similarly, more than half a million Communist-indoctrinated Japanese war prisoners have been recently repatriated, the purpose of which is quite obvious.

It is also interesting to know that the recent election in Japan indicated that the pro-American party in Japan under the leadership of Shigeru Yoshida lost many seats in the Diet and that the rearmament program in Japan is less popular than before the Communist peace offensive became known.

Furthermore, it should be remembered that Article 9 of the new Japanese constitution stipulates that "land, sea, and air forces, as well as other war potential will never be maintained. The right of belligerency of the state will not be recognized." Thus the right of self-defense has been entirely denied the Japanese nation and people and they will be left at the mercy of an aggressor if ways and means are not found for amending this situation.

As to the Philippine Republic, it has been created by the help of the United States and has, for a long time, been politically and economically closer to the United States than any oriental country. By theory it should be farther from communism than any other Asiatic country. However, it is regrettable to learn that the Huks in the Philippines are still quite strong in spite of the strenuous and extensive campaigns launched by the Philippine government against them. Communists have made inroads in the schools, clubs, unions, intellectual circles and even to a certain extent infiltrated certain political circles.

It should also be pointed out that Hainan Island, the southern-most point of China, is only a few hundred miles from the Philippines. Smuggling of arms and propaganda literature has been taking place between Hainan and Luzon. Moreover, if the Communist drive in French Indo-China and Thailand is successful, Communist forces will encircle the Philippines.

As to India, in spite of the large amount of American aid given to New Delhi during the past few years, that country is still on the verge of starvation and Communist strength has grown rapidly in various provinces, especially in Madras. Communist and pro-Communist sentiments can be felt throughout India especially among the intellectual circles. Under Nehru, the Indian government in practically every important issue has become the champion of the cause of Communist China and the most eloquent attorney for the Red government in Peking. The most recent Indian plea for Communist Korea is another example to show that India has served the Chinese and Korean Communist cause better than Moscow under the cloak of a large Asiatic nation.

It should also be noted that Chinese Communist penetration and domination in Tibet is more and more clear today than ever before. More than half a million Chinese forces under General Wang Cheng are stationed on the Tibetan plateau and the largest force in Central Asia has been built by the Communists in Galink, along the Tibetan border.

The Indian Government is now under internal and external threat of communism.

In the field of international politics, the United States has tried to please India. In the last session of the United Nations General Assembly in 1952, the United States delegation even withdrew its own resolution in order to support the Indian resolution for the settlement of the issue of war prisoners in Korea. Yet, the Indian government seems to be not yet satisfied by the friendly gesture of the United States because it is still putting a lot of pressure on the American government to accept the Communist terms today.

As to the peace offensive which you have heard so much about in various parts of Asia and in Europe, I can only tell you what the peace offensive of the Communist world has already accomplished. It has caused the reduction of the budget for defense in Great Britain, France, and the United States. It has delayed the rearmament of Germany and Japan. It caused Burma to think that she should not be too closely allied with the United States. Burma has recently refused to accept economic aid from the United States for fear that if she does she will antagonize Communist China. India, Indonesia and Pakistan have begun to think that they may profit by the present world tension by maintaining neutrality. The peace offensive also creates confused thinking in Korea, Free China, and along the twelve million overseas Chinese.

The peace offensive has indeed not only created a lot of confused thinking in Asia, but also created a certain kind of confused thinking in America. Indeed the Far East today is facing the greatest threat and danger to the free world.

It has long been Lenin's and Stalin's idea to conquer the world by way of Asia. Lenin and Stalin said the shortest way from Moscow to Paris is via Peking, which means the shortest way of conquering Europe is by conquering Asia first. And, of course, they think that if Asia is conquered, Europe will starve to death. People begin to argue that, well, Europe has all the skilled laborers and has the industrial production. Yes, it is true, but where do they get the raw materials? They all come from Asia. And, after all, if you look at the map of the world as a whole, Europe is nothing but a peninsula of Asia. I traveled all over Europe. When I slept for a few hours, I had already passed through two or three countries. But, in China you have to travel hours and hours in order to go through one province.

For instance, Sunchang Province alone is as large as Germany and France combined.

The Communists, I think, are still following the theory of Lenin and Stalin, although Malenkov and his company have changed their tactics to a certain extent; however I think this is only expediency. The so-called peace offensive is just a devious tactic to weaken the will and undermine the strength of the free world, and I am also inclined to think that the Soviet Union, as well as the Communist world, are still following the same policy, to conquer Asia first; I am sure they are now pursuing a southward policy for conquering Asia, by using Chinese volunteers and munitions, together with Soviet advisers and experts to communize and sovietize Asia. If and when this is done by the Communists, the Communist world economically will be far better off than it is today and will be able to isolate America from world politics.

Consequently, I am inclined to think that the Far East is really facing a great danger today. It is standing at the crossroads. It may become a prey of the aggressor, it may become a boomerang to the aggressor, however, I am of the opinion it is a little late, but not too late, for the United States and the free world to use the Far East as a base to defeat Communism and without resort to war. There is still time to avoid a world war if the United States is determined and courageous enough to meet the issues in the Far East today.

I am also convinced that, if a "policy of liberation," as promised by General Eisenhower, John Foster Dulles and other Republican leaders and the Republican platform, which has been approved by the will of the American people, is faithfully carried out, it will be the most effective weapon against communism in the Far East, provided the American Government, with the support of the American people does not vacillate and change its mind in the middle of the course. Today many countries act as if they are friends and allies of the United States; in fact, if you allow me to use this American expression, actually these so-called allies are pulling the leg of the United States.

For instance, England today is supposed to be an ally of the United States, but according to reliable reports and documents which I have personally seen and data I have studied, many English ships have been sending munitions and war materiel to Communist China through the port of Hong Kong; yet the United States has been giving money and munitions to England to fight in Korea. England has some troops in Korea and yet England has been supplying most of the medical needs of Communist China as well as war materiel of Communist China; yet England is trying to dictate the policy of the United States.

I don't want to go into the details of the quarrels between Mr. Attlee and some American senators in Washington. It is enough to say that if the United States wants the support of the allies, it must give them some help. But I think the United States has every reason to expect its allies not to render assistance to the enemy in any way, under any circumstances.

I am now convinced that the peace offensive of the Communists should be looked upon with a jaundiced eye for its apparent purpose is to consolidate its own power and weaken the will and undermine the strength of the free world. According to the best informed observers, the Soviet Union is not now ready to fight a global war; therefore the peace offensive has been launched.

Let us not forget that Communist tactics may have been changed, but certainly not their objectives. In fact the peace offensive has been used before by the Communists as part of their program and as has been just pointed out, such a peace offensive at this time is proving beneficial to the Communist world. Certainly if the Soviet Union were reasonably assured of winning any war she would attack now without any excuse.

But if any appeasement is made in Korea, or any other part of the Far East, the Communists will surely interpret such a move as a sign of weakness and they will certainly take advantage of such a situation to launch further aggression elsewhere. Thus I am inclined to think that any repetition of a Far Eastern Munich or another Yalta would lead to another world war, in which the United States will be deeply involved.

Faced with the alternatives of courageous statesmanship or timid appeasement, I do not like to think of the consequences in the Far East and the world which might result from a possible error or blunder in the form of a Munich or Yalta which may be made by the United States government. I prefer to assume that the United States will follow a prudent and determined course in the Far East. By showing determination and strength, it will be able to avoid another war and enable the Far East to be free of the Iron Curtain and again become friendly with the United States.

Assuming this wise course will be followed and that a friendly Far East and a United States will become partners in the making of world peace, there are still many problems confronting us.

First of all, in order to make the rimland of Asia, including Korea, Japan, Burma, French Indo-China, Thailand, the Philippines and Indonesia safe, China, being the heart of Asia, must be free from the Communist yoke.

If Asia is to be saved, China must be saved first, because China is the key to Asiatic problems. If China is once more liberated from Communist rule, the program of re-educating the public, the redistribution of lands and government reform must be carried out.

Since the end of world war II, the problem of public health in practically the whole Far East has been a great challenge because of the effects of the war, and since the Chinese Communists entered Korea and Viet-Nam, epidemic diseases of many kinds have become prevalent in Korea, China and French Indo-China. The so-called germ warfare which has been so much propagandized by the Communist world is nothing more than an epidemic situation caused by the lack of medical equipment to cope with conditions on these battle fronts. With the exception of Japan, which has been quite advanced in the field of medicine, the rest of the Far East countries urgently need curative and preventive medicine for today and the future.

In conclusion, the importance of the Far East in the relation to the future of America was pointed out long ago by several statesmen and outstanding Americans, such as William Seward, who was Secretary of State under Abraham Lincoln's administration. He prophesied:

"Henceforth European commerce, European politics, European thought, and European activities, although actually becoming more intimate, will nevertheless relatively sink in importance; while the Pacific Ocean, its shores, its islands, and the vast regions beyond will become the chief theatre of events in the world's great hereafter."

Theodore Roosevelt, in 1902, stated: "I believe that our future history will be more determined by our position on the Pacific facing China, than by our position on the Atlantic, facing Europe."

John Hay wrote that: "Whoever understands China socially, politically, economically, and religiously will hold the key to the world problems for five centuries to come."

Ladies and gentlemen, the events in the Far East will certainly play a very important part in shaping the fate of the future world, and in turn the United States certainly will be affected by the Far East socially, politically, economically, and religiously.

As the leader of the free world, the United States faces enormous but unavoidable responsibilities and interests in that vast area of the world both now and far into the future, in the vast areas of Asia where about half of the world population and much of the raw materials are located.

The United States can prudently and wisely lead the free world out of chaos and avoid world war III by adopting a policy of enlightening its self-interest, justice and morality. I think if the present administration follows the footsteps of George Washington, Jefferson and Lincoln, or at least the advice of Henry Stimson and Cordell Hull, I'm sure the United States will be able to maintain peace and security in the world, provided the policy-makers do not take advice from men such as Alger Hiss or Owen Lattimore or John Service or Carter Vincent, or some alien statesman. I believe that if the American government follows and represents the sentiment of the American people, the United States Government will be always right because I believe that the people are always right. And I think that the American people, with a sense of justice and decency, will see to it that the problems of the Far East are peacefully settled, provided a just cause is followed.

In conclusion I wish the convention of The Medical Society of New Jersey great success in the many, many years to come, and let me wish you what the Chinese call "Yuan Chi" or, "Good Luck." (Applause)

DR. MURRAY: I want to thank the nurses from the Atlantic City Hospital for ushering.

We have two very important people in our midst, and just before we say good night, I would like to ask Mrs. Eusden, President of the Woman's Auxilary of the American Medical Association, to stand and take a bow. (Applause)

The other is a man that I have seen two or three times, and I saw and heard him talk a couple of weeks ago in Buffalo, a man that I have a lot of respect for, the immediate past-president of the New York State Medical Society, Dr. Wentworth.

Will you stand up, Dr. Wentworth? (Applause)

Dr. Winslow is also with him as a delegate from New York State Medical Society. Dr. Winslow, please. (Applause)

I thank you for coming. Let's all give Henry Decker a big hand and promise him our undivided attention, interest and help during his forthcoming administration.

The meeting was adjourned at 9:55 p.m.

Tuesday Evening, May 19, 1953

The speakers' section of the banquet convened at 8:05 p.m. in the Vernon Room, Dr. Henry H. Kessler, toastmaster.

DR. KESSLER: Ladies and gentlemen, a very good evening to you all and a warm welcome on behalf of the Woman's Auxiliary, who are tendering Dr. and Mrs. Murray this wonderful banquet.

I have been asked to assume the prerogative of the chair. I wonder why. I think it was because someone must have told the Board the story of this experience of mine out in the Pacific.

I was coming back during the war with about 1200 casualties aboard a little Dutch ship, and among these casualties was a boy who had been badly injured in the campaign on New Georgia Island. It was one of those campaigns that went snafu.

This boy talked back to his superior officer. The first impulse of his officer was to have this boy court-martialled, but then he reflected: This boy is sick, he himself might not have come off too well; but he knew he had to get rid of this boy. He talked the matter over with the doctors. They said obviously this boy is an N. P.; we will send him back to the hospital at Mare Island and turn him over to the psychiatrists.

And so he was sent back stateside to Mare Island where he fell into the hands of psychiatrists, and after a half a dozen interviews they gave him one of these long formidable questionnaires to fill out: Do you wet the bed at night? How do you get along with people? Do you beat your mother? Ad infinitum.

This poor boy shook his head and wrote: "Dear Doctors: There is nothing the matter with my head; it's my big mouth that got me here." (Laughter)

Harrold told me they were looking for a man with an international reputation to M. C. this program this evening, and so I told them about the very famous Dr. Vanderbilt in New York. He was a man with an international reputation, and had an office on Park Avenue. One night Dr. Vanderbilt got sick and he called up Dr. Jones. He said: "Jones, I wish you'd come up here and take care of me."

And Jones said: "Who's calling?"

"Dr. Vanderbilt."

"Do you mean *the* Dr. Vanderbilt?"

"Yes," he replied modestly.

"The man with the international reputation?"

"Yes, yes, yes, yes."

"And with an office on Park Avnue?"

"Yes."

"Well, Dr. Vanderbilt, you are such a big man why don't you take care of yourself?"

"I'd like to, but I'm too expensive." (Laughter)

But, you know, testimonial dinners are not always what they seem to be. I attended a testimonial dinner in New Castle-on-Tyne in England some years ago. It was a farewell dinner to Professor Gray-Turner who was going to take over the directorship of the Post Graduate Medical School in London. It was a stag affair, as many of these English affairs are, and instead of having a dozen speakers to eulogize the guest of honor, they only had one speaker; he was the chairman, the master of ceremonies, and he introduced the guest of honor, who replied with a short witty autobiographic talk and sat down.

Then the chairman said: "My Lords and gentlemen," he lifted his glass, he said: "I give you a toast to the King," and everybody stood up and toasted the king.

He rose again: "My Lords and gentlemen, on behalf of the guest of honor I should like to drink a toast to the medical-dental profession who are gathered here tonight." Everybody stood up and toasted the medical-dental profession.

Whereupon a man in the audience got up and he said: "Mr. Chairman, on behalf of the medical-dental profession I should like to drink a toast to the guest of honor." Everybody stood up; they toasted the guest of honor.

The Chairman rose again: "My Lords and gentlemen, on behalf of the guest of honor I should like to drink a toast to the guests other than the medical-dental profession." Everybody stood up and they toasted the guests other than the medical and dental profession.

Again a man out in the hall got up; he said: "Mr. Chairman, on behalf of the guests other than the medical-dental profession, I should like to drink a toast to the guest of honor." And that's the way they kept on drinking. They were feeling high. That's my idea of a testimonial dinner. (Laughter and applause)

But enough of all this nonsense. I've got to introduce some guests.

Before we introduce our first guest, I should like to tell you a little experience I had in India. I was making a survey for the United Nations, about four or five months ago, and I met a fabulous person in the person of a Madam Fatisma Ismael, a Moslem woman who had a rather tragic experience. Her ten-year old daughter was stricken with poliomyelitis

which involved the arms and the legs. Ten months of good standard orthopedic treatment had restored the use of her arms, but she still couldn't walk. She was resolved that the child would walk.

There she was in Bombay. She had visited all the doctors in Bombay and made a pilgrimage throughout India until she came to Madras on the east coast. There she met a famous doctor, a general surgeon by the name of Kaini, a man about 65, the dean of the Stanley Medical College in Madras, a general surgeon, but a great humanitarian and interested in cripples, and she sought his aid.

He said: "Look, Madam, how can I stop everything and drop everything, all these administrative problems here as dean of the Stanley Medical College? How can I drop all these things and take care of your child?"

Madam Ismael had a charming way with her, almost a seductive quality; and after her long talk with Dr. Kaini, he broke down and said: "Yes, you may remain in my house and you will carry out these purposeful exercises in which I will instruct you, and then perhaps the child will walk."

For ten months she worked as a slavey in Dr. Kaini's home, carrying out faithfully the exercises which he prescribed, and at the end of the ten-month period that child walked. And then she resolved that no other Indian mother would have to go through that same trial and tribulation and torment. She would establish a rehabilitation center in Bombay. And she came back to Bombay and was called the biggest beggar in India; buttonholed all her friends.

The morning I arrived, she refused to let me go to the hotel, but dragged me to a motion picture theater where she was holding a benefit performance, and with other important people we had to get up on the platform, make speeches, and she came away with 20,000 rupees from that motion picture benefit performance.

She stole a workman's hut on the beach; threw out the workmen with their hoes and barrows and white-washed it and turned it into a rehabilitation center. She induced Dr. Kaini to leave his post at Madras and come to Bombay to head her rehabilitation center. She literally dragged Nehru down by the ears and made him give her a grant of land. Today she has a modern, well equipped, fifty-bed rehabilitation center in Bombay. So never underestimate the power of a woman. (Laughter)

That is why I wish to introduce at this time Mrs. Edward H. Dyer, president of the Woman's Auxiliary to The Medical Society of New Jersey, who will give you her welcome.

The audience arose and applauded.

Mrs. Edward H. Dyer: I'm afraid Dr. Kessler is so fluent that he is going to put us all at a disadvantage tonight.

I am happy to have this opportunity to welcome you at this dinner honoring Dr. and Mrs. Harrold Murray.

In this, our 26th Auxiliary year, the Medical Society has given ample evidence of their realization of the importance of the Woman's Auxiliary in aiding them in the implementation of part of their program. It's nice to be important, to feel that we are aiding them and furthering their program in the American way of medicine, and in their public relations program. An important part of our public relations program is to be nice. We stand ready to serve them in any way that we can; to be nice to each other and to all others. And so I say it's nice to be important and it's important to be nice. (Applause)

Dr. Kessler: Thank you, Mrs. Dyer, for that charming note of welcome. We, in the profession, know that we can't get along without you. We know how important in any scheme of collaboration, cooperation it is to have the Auxiliary working at our side.

You know, this word cooperation and teamwork need a lot of explaining. Someone was trying to explain and define teamwork, and I gave them a good explanation. A definition was this story about a woman who was very sick, and it seems that there was nothing organically wrong with her so she was sent to a psychiatrist. After a half dozen interviews he said to her: "Madam, I think I know what your trouble is. The trouble with you is, you do not get enough love. But," he said, frankly, I am puzzled because your husband is such a strong, virile and handsome man; and your lover, he is such a strong, virile and handsome man."

She replied, "That's the trouble, Doctor. Each one is depending upon the other."
(Laughter and applause)

My task is not very simple because we are trying to run this on a schedule, Harrold and I; we are great people for timing; and I told Harrold that story about the time we were in the Pacific. We were on this very slow boat from San Francisco to the Samoan Islands, and we were going at four knots; pretty slow; we were very unhappy. We were just a bunch of refugees from middle age. We didn't know where we were going. And we convinced the captain of the ship to give us a course in celestial navigation.

This man was a born teacher. He was a Dutchman who had sailed the seven seas for over 35 years, and he could convey, he could communicate, he had charm, he had everything. And so he told us about the heavens and all the elements in the heavens, the stars, the galaxies, the constellations; and he said: "Gentlemen, you have no idea how vast the heavens are. They are so vast that we have to create special units of space time, and we call those light years. Millions of light years separate one star from another, one galaxy from another, one constellation from another."

Then he paused, with a half smile he said: "Listen to me talking about millions of light years. If I come home fifteen minutes late my wife gives me hell."(Laughter)

It is my pleasant task at this time to introduce some of the other guests at the table, and I should like to introduce Mrs. Frank S. Forte, president-elect of the Woman's Auxiliary to The Medical Society of New Jersey. (Applause)

I don't have to introduce the illustrious President-Elect, but I do want him to stand up and perhaps say a word of greeting. Dr. Henry B. Decker, President-Elect of The Medical Society of New Jersey. (Applause)

DR. DECKER: I wish that I could be as witty as Dr. Kessler is, but I'm afraid I can't; so I will say thanks very much to the Woman's Auxiliary for this delicious dinner and delightful entertainment, and then sit down, as I should. (Applause)

DR. KESSLER: I'm a little bit at a disadvantage because I wasn't posted with the curriculum of all of the dinner guests at the table, and my memory is not so good, and I must explain that to you.

It seems some years ago I belonged to one of those luncheon clubs where you have a speaker on various subjects — municipal, state, federal—and this particular day we had a man who was a psychologist; he was a great memory expect. There were eighty members of this club. We lined up against the wall and he called off each man's name, occupation, address, right down the line, without a flaw. Remarkable feat of memory. And he was a real go-getting, dynamic salesman, and was giving a course of three lectures for $20, and everybody began to sign up, so I signed up. When I came home I told my wife about it. She said: "You know, my memory is not so good. I'd like to take that memory course, too."

I said: "Wait a minute. I'm not going to invest $40 in two memory courses."

So we compromised. We took one course. I took one lecture; she took the second. We forgot to take the third. Since that time I can't remember a thing. (Laughter)

Father Harrold Murray, you have already met. I want him to stand up again once more and take a bow. (Applause)

Mrs. Johnsen, will you stand up please? (Applause)

Dr. Kessler then introduced Dr. Dyer, Mrs. Harrold Murray, Mrs. Henry H. Kessler, Dr. Johnsen and Dr. Frank S. Forte.

Now, I have a few surprises; I have a surprise for you, Harrold. It just goes to show you what an illustrious man he is. You know, we went to school together. I sat in back of him. (Laughter)

Now this will come as a very pleasant surprise to you, Harrold. This is dated May 19, 1953.

"We, the undersigned, representatives of the exhibitors at the 1953 annual meeting of The Medical Society of New Jersey, wish to pay tribute to the fine cooperation and the general excellent consideration shown us at this meeting and throughout the year.

"As Dr. Harrold A. Murray concludes his administrative term, we especially wish to thank him and his staff and to wish him the best of everything in life which he so richly deserves." And there follows about fifteen pages with signatures, and I'm not going to read those signatures. (Applause)

I have another surprise for you. I'm going to ask Dr. Lathrop, Past-President of the New Jersey Chapter of American Academy of Pediatrics to come up to the dais.

DR. LATHROP: This is the first time in history that a pediatrician has been President of The Medical Society of New Jersey. For many years we pediatricians have watched with wonder and amazement as one of our colleagues has continued to demonstrate his tremendous energy and his tireless devotion to any cause that promised to improve the welfare of the children of New Jersey.

The man whom you honor tonight has done more than any other two men in the state to improve child care in this state. You can hardly mention any organization dealing with any aspect of child care that has not felt the impact of his personality.

Not to mention his activities in the county and state Medical Society, here are just a few of the lay organizations in which he has held responsible positions: He has been on the Board of Trustees of the New Jersey Welfare Council, president of the State Child Caring Group, on the Board of Directors of the Local Chapter of the American Red Cross. He has been vice-president of the Essex County Tuberculosis League, a trustee of the Essex County Service for the Chronically Ill, a mem-

ber of the Governor's Committee on Youth. He was a member of the board of directors of the Welfare Federation, chairman of the Family Service Division of the Newark Council of Social Agencies, chief of pediatrics at St. Michael's Hospital, Newark City Hospital and St. James Hospital, and consulting pediatrician to eight other hospitals. He has been state chairman, district chairman and a member of the National Executive Board of the American Academy of Pediatrics.

Harrold doesn't merely lend his name to these organizations; he becomes familiar with their problems; he studies them and presents the best in pediatric and medical thinking in guiding their plans and their activities. And he does all this so easily, always cheerful and never in a hurry, always having time to chat with a friend, and all the while keeping up a very active pediatric practice. How he does it is a mystery to us all. A good share of the credit must go to the generosity, the tolerance, the self-sacrifice, the unfailing support of his lovely wife, Bee.

The members of the New Jersey Chapter of the American Academy of Pediatrics wanted to express in some concrete way their admiration and respect for Harrold Murray, who represents the ultimate in pediatric service to his community.

Harrold, if Bee won't let you keep this on the mantlepiece, we hope you will find some spot for it on the walls of your office. It says: "To Harrold A. Murray, M.D. From the New Jersey Chapter of the American Academy of Pediatrics, in recognition of his services to the children of New Jersey."

The audience arose and applauded as Dr. Lathrop presented the plaque to Dr. Murray.

DR. KESSLER: Thank you very much, Dr. Lathrop.

When I think about this wonderful tribute that was paid to Dr. Murray, I am reminded conversely or inversely of Orson Welles.

Orson Welles was a great egotist, a great actor, but a great egotist, and it seemed that he had a commitment to go out to a midwestern town to give a talk to the cultural group of that town, and there were 1500 reservations. When he got there a hurricane or tornado or one of those midwestern meteorologic phenomena occurred which prevented them from coming to this meeting, and only fifteen people showed up.

Well, Orson Welles came out on the platform and he was furious. So he turned to his audience and he said: "Ladies and gentlemen, I am Orson Welles. I am an actor. I am a playwright. I am a musician. I am a poet. I am a motion picture producer. I am a sculptor"—he went on and on. He said: "Isn't it too bad there's so many of me and so few of you." (Laughter)

But as Dr. Lathrop was recounting the many exploits of the doctor and how he does them with infinite ease and poise and equanimity, I am thinking of the man in the subway train who was sitting next to another one reading a newspaper upside down. He was very curious and he looked. Yes, he was reading a newspaper upside down. He tapped the man on the shoulder. He said: "Say, mister, you're reading that newspaper upside down." The man glared at him, "In the first place, it's none of your business; and in the second place you think it's easy?" (Laughter)

But Harrold does typify and exemplify not only the best in the medical profession, but I think he has introduced a new note in the activities of our Medical Society by bringing into play the idea and the ideal of community service.

While I was in India I visited several hospitals, and I was very much impressed with what the doctor does all over the world. I'm proud to be a doctor when I see what they have done in these under-developed areas; how, against superhuman obstacles, they have been able to achieve and realize and fulfill the Hippocratic dream. I say to you I'm proud. We should all be proud of the doctor everywhere in the world. In Bombay there are three medical schools. One of them operates in a warehouse, a godown. I gave a talk in that medical school. First, I felt rather queasy, but later on I began to realize that despite those obstacles these men were seeking medical education, seeking to maintain professional standards at their highest. Then they turned to me; they said: "Where do you come from?" I said: "New Jersey." They said: "Do you have a medical school in New Jersey?" (Laughter and applause)

Yes, for years, for centuries they have been held down. I spoke to the doctors in the hospitals and they said it's only recently that they have been permitted to work and operate in these hospitals. I asked, "Haven't you always worked in these hospitals?" "No, the Indian medical service did all the work. We weren't permitted to work in the hospitals at all because we were told that we had no culture; that we were sub-human; we had no art."

And then they took me to the Ajunta Caves not too far from Bombay. Here was a monolithic mountain which had been carved into a Tiffany jewel by the meticulous craftmanship of some of these Indian artisans. It took 400 years to turn this mountain into this beautiful gem with its ballustrades and columns and

sculptures; and this is the interesting feature: I would defy any of you to tell me where one artisan began and the other one finished. It was as if one man had lived 400 years and had designed that magnificent gem. And yet they were told they had no culture.

So you see, against obstacles of all sorts, political, economic and social, there is this intrinsic and deeply intuitive desire to be of service.

One of the finest things I saw in India was the Joint Family Service, the beginnings of community service anywhere in the world. I was asked to see a young boy with pseudohypertrophic muscular dystrophy. This 12-year old was brought out to this place. Well, it looked like an old southern plantation, with beautiful portico and grounds, and there were about 75 people there. I asked my guide: "Who are all these people? Are they workers on this plantation? Are they bearers, servants?" He said: "No, they are all members of this same family. This boy's father died and the family have taken over his care and the care of the widow and they are all looking out for each other,"—the beginnings of community service.

So wherever you go you will find that idea, this idea which Dr. Murray has developed to such a high degree during his administration.

But if you travel around the world and go from country to country you will find a lost continent. This continent is a place where men and women live lives of quiet desperation. It has no borders and no government. It has a soul, but no voice. It has been distilled out of the courage and the tragedy of millions of its inhabitants. This is the world of the handicapped, the sick, the chronically ill, the aged.

Now, why should we all be interested in this lost continent? Well, in the first place, because of their number. God must have loved all these people because there are so many of them. And then because of their cost to society; no nation can afford the luxury of wasted manpower because we face a future that is quite formidable.

Ladies and gentlemen, the 21st century will be an Asiatic century. The Asiatics have a weapon much more potent than the atom bomb. The population pressure in the Far East is terrific. We can only meet that challenge by preserving all our skills and conserving all our manpower.

I said there is a lost continent, but you and I who have read the blind Milton remember that he wrote not only "Paradise Lost," but "Paradise Regained" and we can regain and redeem and reclaim this lost continent by dedicating ourselves anew to our Hippocratic oath. Because in the final analysis this world is not the survival of the fittest; it's the survival of the luckiest. But luck has many names. Luck has the name of the New Jersey State Medical Society, the oldest medical society in the United States, dedicated to the ideal that the object of all help to make help superfluous. And luck has the name of Dr. Harrold A. Murray.

Those of you who have seen St. Paul's Cathedral in England will remember that there are many monuments in that Cathedral to the great of English history, Lord Nelson, Wellington, all the way down the line. But the great architect of that cathedral has no likeness of himself inside the cathedral. Sir Christopher Wren is enshrined in the Toal Cathedral; and so Dr. Harrold Murray is enshrined in our hearts because he has been the architect of a new point of view, a new approach in medical relations.

When I was in Greece I visited a home for the blind. There were 214 boys and girls in that home. They had been victims of the war. They were walking three abreast out in the courtyard, one on either end acting as sort of an anchor man. Many of them were mutilated, with facial scars, an arm missing, or both arms missing. I watched them the entire day going through their classroom studies, eating their thin, watery potato soup for their noonday meal, watching them in their workshops.

In one of the buildings that they took me through there was some delightful music coming from one corner of the building. I inquired who was playing. They said, one of the girls. I said: "I'd like to hear and see her play."

So I walked into this room. It wasn't a room; it was a bare cell, cold, bleak, grimy, wide planks for flooring, gray white-washed walls; and in the center of that room was a dilapidated old piano and seated at that piano was a fourteen-year old girl in a black cotton dress. She proceeded to play Chopin, and that whole scene changed. I was no longer in that depressing, dismal room; I was at Carnegie Hall at a warm and glamorous performance. And she wasn't wearing a black cotton dress, but a white silk dress with sequins. The magic of her music had transformed that entire scene.

It is the magic of service as exemplified by Dr. Murray that can transform the face of this nation into the prosperous, healthful, independent nation that it is.

Those of you who remember your Greek mythology will remember Pandora's Box. When the lethal contents of that box were released, you will remember that the gods took pity on man and decided to leave him with one gift which would help him to survive every natural plague and every human mischief; that gift was hope.

You can live three weeks without food; you can live three days without water; three minutes without air; but you cannot live without hope. Hope is the oath of Hippocrates translated into action. That, my dear friends, exemplifies the guest of honor tonight.
(Applause)

Ladies and gentlemen, at this time I should like to introduce Dr. Sigurd W. Johnsen, the immediate past president, who will present the Fellow's Key to Dr. Murray.

DR. SIGURD W. JOHNSEN: Mr. Toastmaster, honored guests, members of The Medical Society of New Jersey and friends: As we listened to the beautiful tribute paid by Harrold's friend in the pediatric service, you may have noticed the tear that trickled down his cheek. Now, that wasn't a tear of appreciation only. That was also a tear of disappointment because Harrold in his year's work has not quite achieved his goal of meeting and addressing all of the organizations that he had hoped to reach; that tear exemplified the disappointment at not making 300 addresses to organizations all over this state and I'm very very happy that I preceded Harrold because that's going to be a pretty tough schedule for Henry Decker, who follows, and Elton Lance who follows him. (Laughter)

But in this performance The Medical Society of New Jersey has had a marvelous ambassador of good will. Wherever Harrold has gone, he has brought the message of the State Society to every type of organization, not only those we have as cooperating agencies, but to a variety of agencies. And so The Medical Society of New Jersey is greatly indebted to him for this wonderful year of good will ambassadorial service that he has rendered us.

It is not only this service that Harrold has rendered during this past year, but wherever he has gone he has bettered our public relations. "Public relations" are words which have troubled many of us for a good long while, and as doctors, we all try to be good public relations men, but The Medical Society of New Jersey has had one of its finest public relations workers in our president, Dr. Harrold Murray.

And so in behalf of The Medical Society of New Jersey I wish to present Harrold with this key which admits him to the Society of Expired Presidents (laughter), otherwise known as the Fellows of The Medical Society of New Jersey.

DR. MURRAY: Thank you very much.

The audience arose and applauded.

Thank you very much, Dr. Johnsen.

Dr. Kessler, Mrs. Dyer, and friends: I might tell you that I have been deeply touched tonight, not only with the key, which I expected (laughter), but with the wonderful plaque that probably means as much to me and maybe just a little more, particularly with the presentation given by my very good friend Doctor Lathrop.

I treasure it very much, Fred.

Being a pediatrician you have not a poetic license but you have a pediatric license and I think that's why I get away with so much. (Laughter) It's terrific. I can go in, you know, and tell the girls how beautiful they look and how wonderful their Lily Dache hats are; if the average fellow did that, they would say he is getting senile, something is wrong with him; but they say, he is a pediatrician—what are you going to do? (Laughter) I think that's exactly how it works all the way through with the different organizations it has been my privilege and honor to have dealt with during the year.

I'm not going to make a speech tonight because you have heard me talk often enough. You have heard probably one of the finest talkers tonight, my great friend, Dr. Henry Kessler.

I always feel that the man that is a toastmaster for you at your farewell dinner should be a man that you love, respect and honor very much, and that I do Henry Kessler.

He said that I sat behind him in the class. I want to let you in on a little secret. I sat alongside of him and copied every darn thing he wrote. (Laughter and applause.) But probably that is why I am here tonight, and that was in my thinking when I asked him to be my master of ceremonies.

Dr. Kessler, as you know, is one of the outstanding physicians in our country and probably in the world today, and that is no exaggeration. Everywhere he goes he is respected and honored, and I can think of no one that I have been prouder and happier to have had sitting alongside of me than the boy, then, who was in grammar school with me, high school, and interned with me at the Newark City Hospital, and then rose to the great fame that I have been trying to follow in a very small way, and will probably never attain.

He has the most charming wife, and I want to tell you that way back in the City Hospital days, when we were pretty blue, we didn't have much money to go out, to take out wonderful women, his wife used to come up and they would sit and play the piano and the banjo and make it very happy for us.

Tonight as I sat alongside of Henry all these thoughts went through my mind; nostalgia is very wonderful; and I almost felt as young as I did in those days. I now have many more

inhibitions, thank goodness, which keep me out of a lot of trouble. (Laughter)

I want to say to you that I am exceedingly proud tonight, this very happy day of my life, that my son was able to come here and give the invocation. It's a little unique, and everybody who knows me well and hears me split infinitives so often and say the words that I shouldn't say, says how the devil has he a son a priest? (Laughter) I always think it is due to the great guidance and example of his lovely mother, without whom I could not have done anything at all, I'm sure.

I want to introduce to you now three people who are really the greatest thing in my life, outside of my wife of course; I want to introduce my two sons and daughter. My other daughter is unable to be here because she is doing a thing that her father and mother did successfully seven times. (Laughter) Her lovely husband, Doctor Farley, stays around like I didn't do all the time. (Laughter)

And my other boy is somewhere in the Far East. I wish he were here so you could see him because, thank God, he looks just like his mother. (Laughter)

Now, Michael, if you will stand up and show them how well you look in that evening suit. (Applause)

And then lovely Sarah, who was born on my birthday. I hope she doesn't inherit all the things I have. (Applause)

That, I might say, was under, Leo, and boy, that guy had inspiration. (Laughter)

Then Peter. Of course, he is the very quiet member of the family, and sometimes I wonder what is really going on. (Applause)

I want to tell you honestly that my boys are out there waiting to sing; I do not want to take any more of your time, but I couldn't let the occasion go by without telling you that any little thing that I have endeavored to do or have accomplished this year has been due to the inspiration of my predecessor, Doctor Johnsen, who sort of catalyzes and guides me, and he has helped me tremendously; and the sage advice of the Great White Father, whose opportunity it will be to serve you next year, and do it very well.

Every single member — I'm not going to single them out—of our staff, our executive officer with his great talents, our administrative secretary, lovely Mrs. Armstrong, every one of our staff, every member of the committees that worked with me, every officer and the Board who tolerated my rantings and everything during the year—I owe them the greatest debt of gratitude. I cannot let the occasion go by without telling you honestly that anything that I might have accomplished this year has been definitely due to them.

There is one person that I want to honor tonight, too. This is not a surprise to her because, unfortunately, she gets an opportunity to look at the minutes of meetings. We have with us, and have had for the last twenty years in our Medical Society an outstanding woman who has guided us over the very troublesome seas sometimes and has produced a happy landing.

It is now my happy privilege to present to Mrs. Edith Madden, who has served successfully and faithfully for the last twenty years, a little gift from The Medical Society of New Jersey.

I might say it's the damn'dest thing I have ever had, because it's silver and I spent all my spare time polishing it up tonight. (Laughter)

When the Board decided that we should commemorate her services with something very fitting, my wife, who has the most extravagant taste, went up to Gorham's and got her this very beautiful coffee set. It is very nice because on the tray we put this inscription: "In appreciation to Mrs. Edith L. Madden, 1933 to 1953, for her loyal service; from The Medical Society of New Jersey."

Edith, will you come up here and let me give you a kiss? (Laughter)

Doctor Murray presented Mrs. Madden with the gift.

DR. MURRAY: Listen, I have been trying for 20 years to get that kiss and on my only opportunity, a fern gets in my mouth. (Laughter)

Will you say a few words?

MRS. MADDEN: Doctor Murray said it isn't a surprise, but it is, really.

These have been the happiest twenty years of my life and I wouldn't give one of them up for anything, and I hope I'm here to the age that Doctor Allman insists that I am right now. Thank you. (Laughter and applause)

DR. MURRAY: Thank you very much for your tolerance.

DR. KESSLER: Just one or two announcements, if you please. The Mennen Company has announced that there will be a social hour in the Rutland Room, and you are all invited. Bill Mennen is a fellow Cornellian, so I'm very happy to hear about that.

And now the *pièce-de-resistance* of the evening, entertainment by the Doctor's Chorus of the Essex County Medical Society. Gentlemen, the stage is yours. (Applause)

The speakers' section of the banquet was then concluded at 8:50 p.m.

TRANSACTIONS OF
THE WOMAN'S AUXILIARY
TO
THE MEDICAL SOCIETY OF NEW JERSEY
TWENTY-SIXTH ANNUAL MEETING

The twenty-sixth annual meeting of the Woman's Auxiliary to The Medical Society of New Jersey was opened by the President, Mrs. Edward H. Dyer, on May 19, 1953 at 9:00 a.m. at Hotel Haddon Hall, Atlantic City.

The Reverend Dr. John T. Sheehan, Pastor of St. Nicholas Church, Atlantic City, gave the invocation.

The pledge of loyalty was repeated by all present. Mrs. F. Rolfe Westney, president of the Atlantic County Auxiliary, welcomed the physicians' wives to the General Session.

Mrs. Frank S. Forte, president-elect, responded.

Mrs. Harry Subin, chairman of convention, was recognized. Mrs. Subin moved the adoption of the convention program as printed. This was carried.

Mrs. Ralph Eusden, president of the Woman's Auxiliary to the American Medical Association, was introduced and seated.

Mrs. Austin J. Tidaback moved that the minutes of the Twenty-fifth Annual Convention be approved as printed.

Mrs. Harry V. Hubbard conducted the memorial service for deceased members as written by Mrs. William Dodd. Mrs. Harry F. Suter sang, accompanied by Mrs. Frederick G. Wandall, during this ceremony.

Mrs. Asher Yaguda, treasurer, reported a balance of $4,139.59 in the treasury.

The corresponding secretary, Mrs. J. S. D. Eisenhower, Jr., read an invitation to all doctors' wives to participate in the thirtieth annual meeting of the American Medical Association and the functions of its auxiliary. Auxiliary members were also invited to a tea honoring Mrs. Leo J. Schaefer, president-elect of the A. M. A. Auxiliary on June 2nd.

Mrs. Dyer announced that the annual reports of the chairmen of committees and county presidents would be accepted as printed.

The following were elected to the nominating committee.

Mrs. R. John Cottone—Mercer; Mrs. Gerald E. McDonnel; Mrs. George Rowohlt—Bergen; Mrs. Louis Wegryn—Union.

A letter from Dr. C. Byron Blaisdell was read by Mrs. Eisenhower concerning appropriations of Public Relations funds.

The meeting was recessed for luncheon.

The general session was called to order following luncheon by Mrs. Dyer.

Mrs. Thomas H. McGlade, chairman of the nominating committee, presented the following list of officers, who were duly elected for the coming year:

President-Elect: Mrs. Paul E. Rauschenbach; *First Vice-President*: Mrs. Andrew C. Ruoff; *Second Vice-President*: Mrs. Bertram J. L. Sauerbrunn; *Recording Secretary*: Mrs. D. Leo Haggerty; *Treasurer*: Mrs. Thomas DeCecio; *Directors*: Mrs. John C. Voss, Mrs. Richard H. Demaree, and Mrs. Banks Baker to fill the unexpired term of Mrs. Haggerty.

Mrs. Don Epler was recognized to read the following resolution which was adopted.

RESOLUTION ON INTERNATIONAL TREATIES AND COVENANTS

Whereas, The Woman's Auxiliary to The Medical Society of New Jersey has been informed that covenants have been approved by the International Labor Organization which are in opposition to accepted custom in the United States; and

Whereas, such treaties and covenants are in the first instance adopted by the International Labor Organization by vote of representatives who are appointed officials and not elected officers of the United States; and

Whereas, treaties and covenants that have been prepared in such manner are being presented to the Congress of the United States for ratification; and

Whereas, the ratification of such treaties would bring results that are contrary to the laws of the United States and the laws of the forty-eight states of the United States; and

Whereas, it is the sense of those attending this state convention that positive action should be taken at this time; now therefore, be it

RESOLVED, That the Woman's Auxiliary to The Medical Society of New Jersey go on record as disapproving the intent and purpose of such treaties or covenants and that the Congress of the United States be memorialized to disapprove and not ratify such treaties and covenants; and be it further

RESOLVED, That the Woman's Auxiliary to The Medical Society of New Jersey reiterate and reaffirm its endorsement of the theory of the proposed amendments to the Constitution of the United States relating to ratification of treaties and covenants which are now pending before the Congress of the United States; and be it further

RESOLVED, That the Woman's Auxiliary to The Medical Society of New Jersey by resolution, instruct its secretary to send copies of this resolution to all members of the Congress of the United States of America from the state of New Jersey: Senator Robert C. Hendrickson and Senator H. Alexander Smith, and to our fourteen Congressmen; to the chairman of the Senate Judiciary Committee, Senator William Langer and to the chairman of the House Judiciary Committee, Hon. Chauncey W. Reed.

Mrs. Samuel L. Winn reported a total registration of 339.

Mrs. Dyer appointed the reading committee, Mrs. Thomas H. McGlade, Mrs. R. John Cottone, and Mrs. Bertram Sauerbrunn.

Mrs. Dyer announced delegates to the convention of the Woman's Auxiliary to the American Medical Association.

The installation of new officers was conducted by Mrs. David Allman. The gavel was then turned over to the new president, Mrs. Frank S. Forte by the retiring president, Mrs. Edward Dyer.

Following Mrs. Forte's speech of acceptance to the office of president the 26th Annual Session of the Woman's Auxiliary to The Medical Society of New Jersey was declared closed.

INDEX

Advisory Committees 37
American Medical Education Foundation Contribution 39
Annual Meeting Committee 37
Annual Meeting, 1954 37
Annual Meeting Sections 34, 38
Carr, John G. 2
Chronically Ill Advisory Committee 25
Civil Defense Committee, State, Resolution on (Bergen) 30, 38
Civil Defense Volunteers' Insurance, Resolution on (Bergen) 31, 37
Constitutional Amendment 37
Decker, Henry B. 40
Dues, Annual 18, 35
Election 13, 34
Emeritus Membership 21, 38
English, Harrison F. 15
Executive Officer 35
Federal Reorganization Plan No. 1, Resolution on (Union) 33, 38
Finance and Budget Committee 18, 35
Honorary Membership 22, 38
Hospital Abuses, Correction of, Resolution on (Hudson) 32, 38
Hospital Relationships Advisory Committee 25
Judicial Council 35
Kessler, Henry H. 48
Legislative Committee 23, 37
Legislative Executive Secretary, Resolution on (Gloucester) 32, 35
Lull, George F. 39
Medical Defense and Insurance Committee 22, 37
Medical Education Committee 37
Medical Examiners, State Board of 37
Medical Research Committee 36
Medical School Committee 21, 36
Medical Service Administration 33, 35
Medical-Surgical Plan 36
—Discussion on 3
—Resolutions on 30, 32, 34, 36
—Supplemental Report 27
Nominating Committee Report 34
Nursing Advisory Committee 26
Pan, Stephen C. Y. 42
Pharmaceutical Problems Committee 37
Physicians' Retirement Bill, Resolution on (Essex) 31, 37
President 35
Public Relations Committee 37
Publication Committee 35
Radiology Advisory Committee 26
Reference Committees
A 35
B 35
C 35
D 36
E 37
Constitution and By-Laws 37
Miscellaneous Business 37
Resolutions and Memorials 38
Resolutions 30, 35, 36, 37, 38
Scientific Awards 38
Scientific Exhibit Committee 38
Scientific Program Committee 38
Secretary 35
Subcommittees 37
Telephone Listings 34, 37
Treasurer's Report 19, 35
Trustees 33, 35
United States Constitution Amendment, Resolution on (Union) 33, 37
Veterans' Care, Resolution on (Essex) 31, 38
Welfare Committee 23, 37
Welfare Services Advisory Committee 26
Wentworth, Edward T. 14
Winslow, Floyd S. 15
Woman's Auxiliary Advisory Committee 23, 37
Woman's Auxiliary Transactions 55
Yepsen, Lloyd N. 16, 38

The New York Academy of Medicine

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